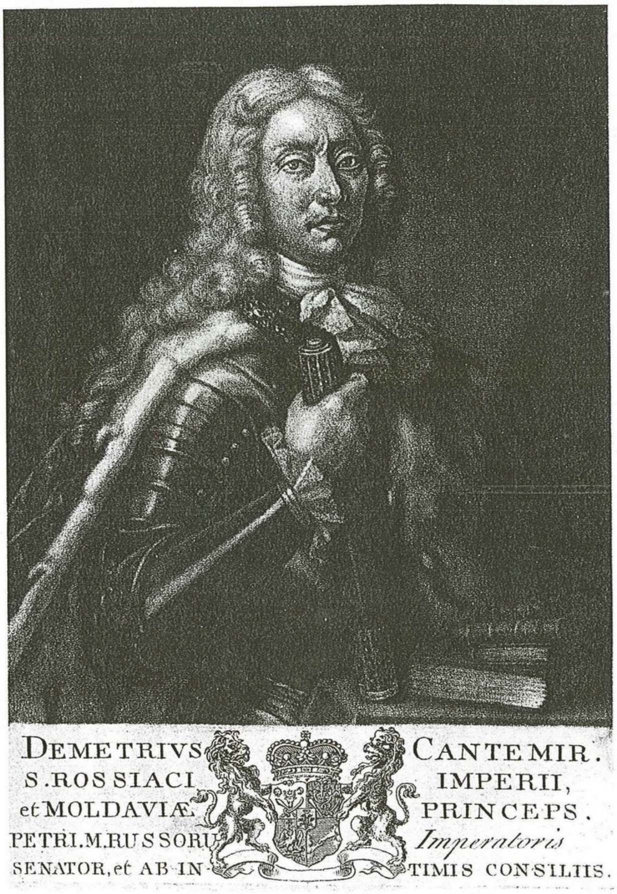
DEMETRIVS CANTEMIR.
S.ROSSIACI IMPERII,
et MOLDAVIÆ PRINCEPS.
PETRI.M.RUSSORU Imperatoris
SENATOR, et AB INTIMIS CONSILIIS.

Demetrius Cantemir: The Collection of Notations

Volume 2: Commentary

OWEN WRIGHT

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TO THE MEMORY OF MY MOTHER

Prelude

1.1 *Life*

A man of many and considerable talents, Cantemir has several reputations. For Romanians he is revered as a major national cultural figure; on the intellectual map of eighteenth-century Europe he has a secure position as an important historian; and in Turkey, where he is known as Kantemiroğlu, he is recognized for his outstanding accomplishments in the field of music, as performer, theorist and, above all, composer.

Born on the 26th of October 1673 at Silişteni in Moldavia, Demetrius Cantemir was the son of Constantin, Prince of Moldavia (1685-93) and vassal of the Ottomans, whose suzerainty the province had been obliged to acknowledge since the mid-fifteenth century.[1] To ensure Constantin's compliance the presence of one of his sons as a princely hostage was required in Istanbul, and Demetrius duly arrived in 1687, at the age of 14, to replace his elder brother Antioch. He stayed until 1691 and then returned two years later to remain in Istanbul until 1710, for part of the time acting as his brother's representative. In 1710 he was himself appointed Prince of Moldavia,[2] but promptly switched his allegiance to the Russians, forming an alliance with Peter the Great (1682-1725). Had it been successful this would doubtless have been judged a shrewd rather than an impulsive move, but in the event it was confounded by the unexpected Ottoman victory over the Russians at Stănileşti on the river Prut in 1711, as a result of which Cantemir was forced to flee.[3] He spent the rest of his life in Russia, attached to the court, where he served as an adviser with the rank of Imperial Chancellor. He was able, nevertheless, to devote much of his time to scientific, scholarly and literary pursuits, and the resulting production, when added to his earlier writings, demonstrates his abilities over an extraordinarily wide range: he has been described as *'historien, géographe, cartographe, romancier, musicien, architecte, théologien et philosophe'*.[4] Among the major works of this last period may be mentioned the *Descriptio Moldaviæ* of 1717 and, completed in the previous year, the *Incrementa atque decrementa aulæ Othomanicæ*. The manuscript of this pioneering survey, which was to ensure for him an enduring reputation in the West as a historian, was brought to London by his son Antioch, who had been appointed Russian ambassador to Great Britain, and it was first published in 1734-5 in an English translation.[5] Subsequently it also appeared in French and German,[6] and it was to remain the standard source on the Ottomans until superseded by Hammer-Purgstall's *Geschichte des Osmanischen Reiches* of 1827-35.[7]

---

[1] Despite constant but only occasionally and temporarily successful attempts to break free. For a general outline history see e.g. K.W. Treptow (ed.), *A History of Romania* (East European Monographs, no. CDXLVIII), New York: Columbia University Press, 1996.

[2] These bald statements in fact mask a number of rapid changes of ruler during this period. Between the death of his father in 1693 and his own accession in 1710, Cantemir himself (*Descriptio Moldaviæ* (Operele Principelui Demetriu Cantemiru, vol. 1), Bucharest: Typographia Curtii, 1872, pp. 46-7) cites no fewer than seven, including his brother Antioch twice. He also claims that he himself was poised to succeed his father, but could not obtain Ottoman backing and had to withdraw (Demetrius Cantemyr, *suffragiis procerum in solium evectus, et Iassiis a duobus Patriarchis unctus, sed cum confirmationem ab othmanna aula impetrare non posset, coactus fuit locum cedere*).

Appended to the English translation is a biographical sketch, probably by Antioch, which gives a brief description of his working habits when he could lead what might be described as an academic life (although not, fortunately for him, in the modern sense):

---

[3] M. Guboglu ('Dimitrie Cantemir - orientaliste', *Studia et Acta Orientalia*, 3, 1960, 129-60) offers a positive interpretation, suggesting (p. 131) that Cantemir had long wished to cultivate connexions with Russia, and that he was acting in accordance with his perceptions of the decline of Ottoman power. To this could be added that he was following a time-honoured model of trying to free Moldavia from Ottoman control and secure for it as much independence as the ever-changing pattern of relations among its more powerful neighbours would allow. Turkish views, not surprisingly, are sometimes less flattering, his actions being described as treachery (*ihanet*) and he himself as a Godless traitor (*hâin-i bî-dîn*). A rather more reserved position is taken by S. Faroqhi (*Kultur und Alltag im Osmanischen Reich*, Munich: Beck, 1995, p. 97), who suggests that his motivation may have been primarily economic.

[4] G. Cioranesco, 'La contribution de Démètre Cantemir aux études orientales', *Turcica*, 7, 1975, 205-32. The present brief biographical notice draws heavily on this article, and also on:

- M. Guboglu, op. cit.
- P.P. Panaitescu, *Dimitrie Cantemir: viaţa şi opera*, Bucharest: Editura Academiei Republici Populare Romîne, 1958.
- E. Popescu-Judeţ, 'Dimitrie Cantemir et la musique turque', *Studia et Acta Orientalia*, 7, 1968, 199-213.
- Y. Öztuna, *Türk musikisi ansiklopedisi*, 1, Istanbul, 1969, s.v. Kantemiroğlu.
- İ.B.Sürelsan, *Dimitrie Cantemir (1673-1723)*, Ankara: Türk Millî Komisyonu, 1975.

The occasional differences between these sources as to matters of fact are of no particular consequence in the present context.

[5] *The history of the growth and decay of the Othman Empire*, tr. N. Tindal, pt. 1, London, 1734, pt. 2, London, 1735; 2nd ed., London, 1756.

[6] Both from the English. The French translation (*Histoire de l'empire ottoman, où se voyent les causes de son agrandissement et de sa décadence*, tr. F. de Joucquière, Paris) appeared in 1743, the German (*Geschichte des osmanischen Reichs nach seinem Anwachse und Abnehmen*, Hamburg) in 1745. An Italian translation was also made, but remained unpublished.

[7] One indication that he was still known as an Ottoman historian in the early nineteenth century among educated non-specialists is provided by Byron's casual references to him as an authority in *Don Juan*.

> His custom was to rise at five in the morning, and, smoaking a pipe of tobacco over a dish of coffee after the *Turkish* manner, he retired to his study till dinner, which was constantly at noon ... He slept a little after dinner, and the rest of the day was spent in the study till seven in the evening.

But in later years distractions were not wholly to be avoided, for after his appointment as Privy-Counsellor

> ... the affairs of state, and the charms of a beautiful young spouse, frequently took him off from his studies.

His first wife, Cassandra, the daughter of a former Prince of Wallachia, whom he married in 1699, died in 1713, shortly after their arrival in Moscow; the young spouse so coyly referred to was Anastasia, the third daughter of Prince Trubezkoy, whom he met in 1718.[8]

In 1722 Cantemir took an active part in Peter the Great's Caucasian campaign, but fell ill, and died on the 21st of August 1723, shortly after his return to his estate at Dimitrovka in the Ukraine. He was survived by six children, a daughter by his second wife and a daughter and four sons by his first.

If the circumstances of the latter period of his life are fairly well known, much about the years he spent in Istanbul remains obscure. The bald dates of his arrivals and departures may readily be cited, but of what happened in between little can be said, although he must have been in constant touch with events at home and with whatever intrigues and shifts in policy on the Ottoman side might affect the situation in Moldavia. It is also clear that he took full advantage of the intellectual opportunities that his position allowed. He seems to have been fortunate in finding in his first tutor, Cacavelas, a Greek priest, a man of wide scholarship, and he was subsequently able to familiarize himself not only with the culture of the Greek Phanariot community but also with that of the Ottoman Turks, which for him involved, as well as the study of history and religion, the acquisition of practical and theoretical mastery in the field of music.[9]

His teachers, so Cantemir himself informs us, were Kemânî Aḥmed and Angeli, the latter a tanbur player four of whose compositions are recorded in the collection of notations.[10] According to the biography appended to the *History*, his musical studies began during his first stay in Istanbul, between 1687 and 1691,[11] and he may also have been exposed to a certain amount of Turkish music during the following two years spent in Iaşi.[12] He seems to have studied solely with instrumentalists, even if he evidently knew and respected the composer ʻIṭrī, whom he quotes as an authority: there is no evidence of his having acquired comparable expertise in the vocal repertoire, and no songs appear among his notations.[13] He became renowned as an outstanding tanbur player, and although his political status must in any case have provided access to senior state officials, his musical prowess no doubt helped him in cultivating and strengthening contacts with court circles:[14] he was friendly with Rāmī Meḥmed Paşa, who rose to become Grand Vizier, briefly, in 1703, and informs us that he was asked to write a treatise on music by Dāvūl İsmāʻīl Efendi, the Imperial Treasurer (*ḫazīne-i hümāyūn müdīri*), and Laṭīf Çelebi, Palace Treasurer (*sarāy ḫazīnedārı*), who were, or had been, his pupils.[15]

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[8] According to C. Măciucă (*Dimitrie Cantemir*, Bucharest: Editura Tineretului, 1962) they met in 1719 and married early in 1720, but 1718 is the date given in the biography appended to the *History* (1st ed., p. 458).

[9] Guboglu (op. cit., p. 130) sums matters up by saying that Cantemir *'réussit à s'assimiler les trois grandes cultures de son époque:* le classicisme gréco-latin, l'humanisme italien *et* la culture musulmane'. For the general intellectual context see also A. Duţu, *Sinteză şi originalitate în cultura română*, Bucharest: Editura enciclopedică română, 1972, pp. 103-6 and 120-2.

[10] *History*, p. 151. Three (nos. 297, 304, 315) by Cantemir. 340 is a later addition in another hand.

[11] pp. 455-60, where we are told: 'He remained at *Constantinople* till 1691, when ... he returned to his father. During his stay at *Constantinople*, he studied the *Turkish* language and musick.' For Cioranesco (op. cit., p. 207) he began his musical training later, with Cacavelas in Iaşi, but the biography is supported by the date 1690 given for Angeli's death by İ.H. Uzunçarşılı ('Osmanlılar zamanında saraylarda musiki hayatı', *Belleten*, 41, 1977, 79-114, at p. 91), if without specifying the source. Uzunçarşılı also quotes some garbled figures for the palace fees paid to Angeli for tuition, at a daily rate of 40 akçe, during 1678.

1.2 *Context*

This treatise, we may assume, is the one we possess.[16] But we do not know exactly when it was written, the only other clue being the further remark that it was presented to a Sultan Aḥmed, which gives us two theoretically possible candidates, Aḥmed II (1691-5) and Aḥmed III (1703-30). Although each has his advocates, the great majority opt for the former.[17]

---

[12] Cantemir refers to Turkish music when describing procedure at court banquets (*Descriptio Moldaviæ*, p. 95): *Stolnicus magnus primo opposita principi cibaria praegustat, quo facto, cum ad capiendum cibum princeps manum extenderit, tormenta exploduntur, applauditque et christiana et turcica musica.*

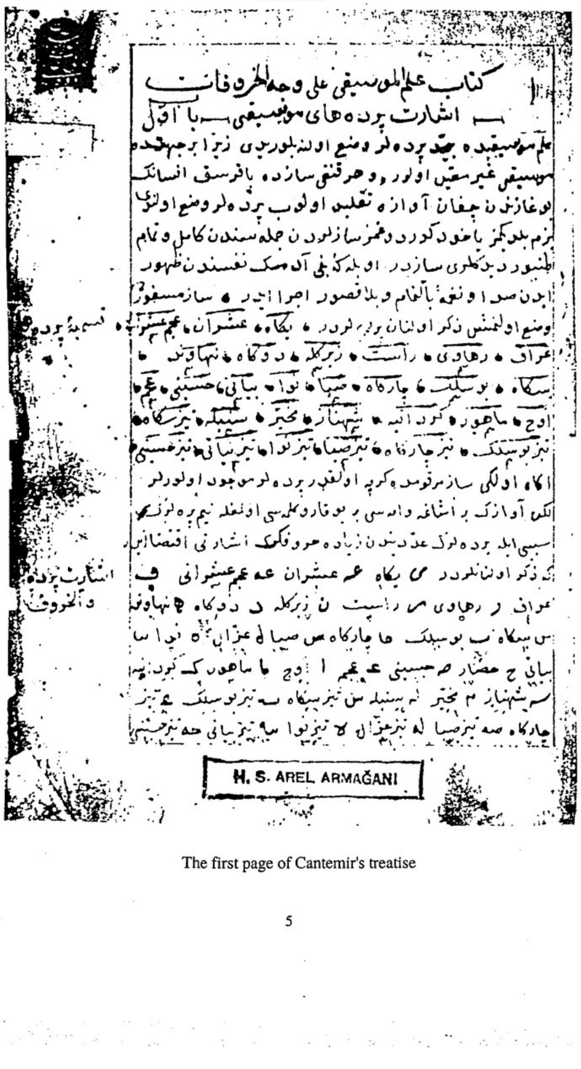
[13] *pace* Cioranesco, op. cit., p. 208.

[14] ibid.; Popescu-Judeţ, op. cit., p. 202.

[15] *History*, p. 151.

[16] Despite the fact that the title is given in a slightly different form (*taʻrīf el-mūsīḳī ʻalā vech-i maḫṣūṣ* as against the *kitāb-ı ʻilm-i mūsīḳī ʻalā vech ül-ḥurūfāt* of the manuscript) which happens to be the heading of one of its sections. The same title is given by G. Toderini (*Letteratura turchesca*, vol. 1, Venice, 1787, p. 225), who claims to have seen a copy, but as he is clearly relying on the relevant passages in the *History* he may have taken the title from there rather than from the original. Popescu-Judeţ (op. cit., p. 203) relates this title to the manuscript containing the mid eighteenth-century Kevs̱erī collection, and mentions yet other titles (but perhaps of treatises derived from Cantemir). Nevertheless, the possibility of a preliminary shorter version under the title *taʻrīf el-mūsīḳī ʻalā vech-i maḫṣūṣ* cannot be ruled out (even if Cantemir's reference to 'a little Book' is surely mock modesty). He concludes his remarks on music in the *History* by expressing his hope to compose a further work on Turkish music, but if written the work has not survived.

[17] For Aḥmed II are O. Akdoğu (*Türk müziği bibliografyası (9.yy-1928)*, Bornova-Izmir: Ege Üniversitesi Basımevi, 1989, p. 26), T.T. Burada ('Scrierile muzicale ale lui Dimitrie Cantemir, Domnitorul Moldovei', *Ananele Academiei Române*, Mem. Secţ. Lit., ser. II, 32, 1909, 79-192), Cioranesco, E. Neubauer ('Der Essai sur la Musique Orientale von Charles Fonton mit Zeichnungen von Adanson', *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften*, 3, 1986, 335-76, at p. 344), G. Oransay (*Die melodische Linie und der Begriff Makam der traditionellen türkischen Kunstmusik vom 15. bis zum 19. Jahrhundert*, Ankara: Türk Tarih Kurumu, 1966, p. 83), Öztuna, Sürelsan, Toderini, H. Wurm (*Der osmanischer Historiker Ḥüseyn b. Ğaʻfer, genannt Hezārfenn, und die Istanbuler Gesellschaft in der zweiten Hälfte des 17. Jahrhunderts*, Freiburg im Breisgau: Klaus Schwarz Verlag, 1971, p. 16), and Rauf Yekta Bey ('Musique orientale. Le compositeur du *Péchrev* dans le mode *Nihavend*', *La Revue musicale*, 7, 1907, 117-21; which leaves for Aḥmed III only Feldman and Guboglu. Popescu-Judeţ seems to support both, mentioning first Aḥmed II (op. cit., p. 204: the first reference to Aḥmed III is surely, in context, a misprint), but then switching to Aḥmed III (E. Popescu-Judetz, *Dimitrie Cantemir: cartea ştinţei muzicii*, Bucharest: Editura musicală a uniunii compozitorilor, 1973, p. 70).



كتاب علم الموسيقى على وجه الحروفات

باب اول — اشارت پرده های موسیقی

H. S. AREL ARMAĞANI

The first page of Cantemir's treatise

However, the identification is simply asserted rather than justified, and it is actually rather difficult to put up a credible case for the earlier Aḥmed. We would need to accept that by 1695 at the very latest Cantemir had not only acquired sufficient expertise and authority to have future court officials as pupils of his own, but had actually completed a substantial theoretical work in response to their request. Even for someone of evidently prodigious gifts such precocity seems intrinsically unlikely, and in fact Cantemir speaks in the same passage of a period of fifteen years of study, so that even if he had begun to take lessons immediately after arriving in Istanbul in 1687 his apprenticeship would still only have come to an end in 1702. But what is surely conclusive is that he comments (in Tindal's English translation of the *Incrementa*) on the treatise being presented to 'the present Emperor', which in a work written in the second decade of the eighteenth century can only mean Aḥmed III.[18] On the natural assumption that the presentation took place after Aḥmed became Sultan the event must have occurred during the period 1703-10, and although the treatise may have been in gestation before 1703, a possible inference is that the request for such a work was not made before 1705.[19]

But whether or not the date of the composition of the treatise can be narrowed down to 1705-10, the compilation of the collection may well not have coincided with it. It is also clear that, unlike the treatise, the collection remained unfinished, at least in the sense that it was open-ended and could have had further additions made to it—as indeed was to happen subsequently. Nevertheless, for all practical purposes the two should be regarded not merely as complementary but as contemporary, combining a representation of the instrumental repertoire of the turn of the century with a distillation of its theoretical underpinnings. The extent to which the collection exhibits stylistic diversity will be discussed below, but it is evident that some of the pieces in it, including most obviously those by Cantemir himself, were of recent production, embodying the latest compositional trends, while others, even if somewhat altered through oral transmission, are still representative of the compositional practice of the early seventeenth century. Indeed, comparison with the mid-century collection

of ʻAlī Ufḳī suggests, despite a number of significant changes, a generally high level of continuity in the many pieces common to both.

The most striking differences between them relate, rather, to the nature of the repertoires they contain. Whereas the various types of vocal and instrumental music included by ʻAlī Ufḳī give a fair idea of the wide range of genres that would have been encountered at court, from lengthy and complex peşrevs to strophic folk songs and dance pieces,[20] Cantemir is narrower in his approach, and not simply because he fails to notate any vocal music: implying a distinction that may well have been unknown to ʻAlī Ufḳī, his concerns are restricted to what may be described, however awkward the term, as the art-music end of the spectrum. In the treatise he only discusses those categories of instrumental and vocal music with which was associated a specific theory of modal (especially), rhythmic and formal structures; and it is precisely on the grounds that they were not deemed subject to those basic structures (termed the *uṣūl-i mūsīḳī*) that he refuses to take account of genres associated with the karadüzen and çöğür folk lutes.[21]

At the same time, the corpus is not without internal divisions. Most of it, if not all, was doubtless performable by a solo instrumentalist such as Cantemir himself, either as individual pieces played separately, or selected for inclusion within a cyclical form consisting of a prescribed sequence of instrumental or vocal and instrumental pieces (see 1.3.2). Such sequences would include examples of the two instrumental genres in the collection, peşrev and semai, and specific pieces in both would also have been included in two other and quite distinct repertoires: that of the Mevlevi rite (where the ney would have been the dominant melody instrument),[22] and that of the mehter, the Janissary military band (where the equivalent instrument was the zurna).[23]

Of his musical apprenticeship Cantemir tells us only its length, fifteen years, and the identity of his teachers. Any musicological literature that he might have examined would have had no effect on the practical acquisition of repertoire and technique, and on these crucial matters he remains silent. Both his teachers, Kemānī Aḥmed and Angeli, were Greek, the former a convert to Islam, the latter Orthodox, but this does not mean that his training in the theory and practice of the Ottoman musical tradition was in any way unorthodox: Angeli was a competent composer, and moreover sufficiently expert as a performer to have been hired alongside Kemānī Aḥmed as a teacher in the Palace School.[24] Although, inevitably, the taste (and patronage) of the urban Muslim élite was a major determinant of the direction that musical culture would take, non-Muslims (or converts) were able to play a significant rôle, especially as performers, but also as teachers,[25] and occasionally as composers: those represented in Cantemir's collection include, in addition to Angeli, a Jew (Hārūn Yahūdī) and an Armenian (Ermenī Murād Çelebi). Indeed, it is quite possible that the distinctly Ottoman repertoire and idiom that had evolved during the sixteenth century was an amalgam of several cultural strands, and to the extent that this is so such non-Muslim musicians and composers may be regarded as continuing an earlier process, not merely working within a common tradition but actively contributing to its development.[26] In general, it appears to have been the case that both during and after Cantemir's years in Istanbul there was a permeability and openness about Ottoman society[27] that allowed gifted musicians unimpeded access to court patronage irrespective of origin, and no doubt incidentally helped reinforce a unity of musical culture among Muslim and non-Muslim communities alike: it is clear that the idiom of what is conventionally termed Ottoman art-music was to be adopted as normative among Greeks and Jews, the result being not only a continuing flow of performers and composers from these communities but also the creation of parallel vocal repertoires which conformed to shared compositional rules but set texts in Greek or Hebrew.[28]

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[18] A point made by Popescu-Judetz (ibid.). From the mention of his pupils (*History*, 1st ed., p. 151) the passage runs: 'Daul Ismail Effendi, first Treasurer of the Empire, and Latif Chelebi, his Haznadar. By their request, I compos'd a little Book on the Art of Music in Turkish, and dedicated it to the present Emperor.' The difficulty seems to stem from the fact that although the second edition identifies him as 'Ahmed (III)', in the first he appears as Ahmed II. As Popescu-Judetz (*cartea*, p. 79) quotes from a copy of the original '*hodierno Imperatori Ahmed dedicavimus*', it is likely that the variable specifications in Tindal's translation are his own additions, and that the Ahmed (III) of the second edition is thus meant to correct the first. But it is from the first edition that the French translation was made, thus helping Ahmed II to become the established candidate (text quoted in Rauf Yekta Bey, op. cit.). The earliest modern scholar, Burada (op. cit., p. 6/84) also quotes a translation running '*Am compus o carte mică în limba turcească despre arta muzicii, și am dedicat-o lui Ahmed II Sultanul acum stăpânitor.*' It may also be noted that a parallel reference to 'the present Sultan', without specifying which, is made by Cantemir in a later work, the *Systema de religione et statu Imperii turcicii* (*Sistemul sau întocmirea religiei muhammedane*, tr. V. Cândea, Bucharest: Editura Minerva, 1977, p. 354/464).

[19] The date 1703-4 is advanced by Guboglu (op. cit., p. 157). This seems plausible but, in the absence of supporting evidence, no more so than the following years prior to Cantemir's departure. Feldman (op. cit., p. 506, note 20) equally plausibly places the composition of the treatise between 1700 and 1710. But if Cantemir's wording is construed as suggesting that his two pupils commissioned the work when they actually held the titles he gives them, it would point to 1705 (see E. Neubauer, op. cit., p. 347) as the earliest date.

[20] Further such evidence can be gained from his contemporary Evliya Çelebi (see Feldman, op. cit., p. 22).

[21] *edvār*, p. 97: بونلردن ما عدا قره دوزن وچغور هوالری واردر که کرچه دیشیله ایرلایش اولورلر لکن اصول موسیقیده کیرمدکلری سببی ایله موسیقی قعیده سندن خارج اولوب تعریفلرینی ایلمك بیهوده زحمتدر.

[22] Cantemir gives a fairly precise and full account of the Mevlevi *mukabele* (*Systemul*, pp. 399-400), but while he was no doubt personally acquainted with musicians and composers who were members of the order he nowhere indicates which pieces were so used.

[23] A considerable number of pieces from Cantemir's collection have been identified as part of the mehter repertoire in H. Sanal, *Mehter musikisi. Bestekâr mehterler—mehter havaları*, Istanbul: Millî Eğitim Basımevi, 1964.

[24] İ.H. Uzunçarşılı, op. cit.

1.3 *Text*

It is said that in 1710, when Cantemir was at last offered the throne of Moldavia, he expressed his gratitude to the music-loving Aḥmed III by composing for him a semai which

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[25] Popescu-Judeţ, op. cit., p. 201, also mentions a Jewish musician, Halisar, who was a teacher at the Palace School.

[26] A brief summary of changing social patterns of music making during the sixteenth to eighteenth centuries (with particular reference to the sacred/secular divide) is given by Feldman, op. cit., pp. 21-3. Among the various strands alluded to would be elements of the increasingly marginal Persianate art-music repertoire; provincial styles including significant Anatolian elements (Feldman refers (p. 48) to the fascinating case of one of Cantemir's contemporaries, a chief müezzin known for his instrumental playing in Türkmen style); and even if there is no confirmatory evidence, it is reasonable to assume that local Istanbul styles would have absorbed Greek elements (H.S. Arel (*Türk musikisi kimindir*, Istanbul: Millî Eğitim Basımevi, 1969) will have none of this, but by concentrating solely on the problems of deciphering Byzantine notation largely misses the point).

[27] For the important role played by non-Muslim instrumentalists see Feldman, op. cit., pp. 48-9; and pp. 62-4 for a characterization of attitudes during this period (which have provoked such labels as 'secularism', 'materialist' and even 'atheist'). For a general account of cultural contacts between Muslims and non-Muslims in the seventeenth century, see also Wurm, op. cit.

[28] For the Greek community, even if dealing with a later period, see M. Bardakçı, *Fener Beyleri'ne Türk şarkıları*, Istanbul: Pan Yayıncılık, 1993. For Jewish participation see E. Seroussi, 'The Turkish makam in the musical culture of the Ottoman Jews: sources and examples', *Israel Studies in Ethnomusic-ology*, 5, 1990, 43-68; and 'The peshrev as a vocal genre in Ottoman Hebrew sources', *Turkish Music Quarterly*, 4/3, 1991, 1-9. A major source for sixteenth-century contacts is A. Tietze and J. Yahalom, *Ottoman melodies Hebrew hymns: a 16th century cross-cultural adventure*, Budapest: Akadémiai Kiadó, 1995. Given the immigration history of the Sephardi communities it seems clear that this period was essentially one of Jewish borrowing resulting in the creation of a large number of Hebrew *contrafacta* and the adoption of Ottoman modal and rhythmic norms and nomenclatures: the emergence of Jewish composers within the Ottoman tradition is essentially a seventeenth-century phenomenon.

was warmly appreciated by the Sultan.[29] But there is no indication of the nature of Aḥmed III's response to Cantemir's gift of a treatise, although assuming that he actually read the work an equally positive response is rather unlikely: given its novelty and relative complexity when set against earlier Ottoman texts on music he could be excused for finding its contents if not abstruse then at least occasionally puzzling. As for the collection of notations, he would probably have found this at best a curiosity; he can certainly have had not the slightest inkling of its historical importance. But there is no reason to suppose that he was ever confronted with it, for despite the intimate relationship between treatise and collection which would certainly have made it logical for Cantemir to present both together he does not mention having done so, and there are grounds for assuming that he did not: the collection, unlike the treatise, cannot be located within a tradition that the Sultan might have been expected to recognize and appreciate; in the form in which it survives it could be regarded as incomplete and hence inappropriate as a gift (and it is most unlikely, given the nature of its contents, that Cantemir would have made or commissioned another copy in a more polished and seemingly more finished form); and if, experimental early drafts apart, the version we have is the only one Cantemir made, the inclusion within it of materials in different and presumably later hands suggests not that it was left to accumulate dust on a palace library shelf but that it was entrusted on his departure from Istanbul to a pupil or other close musical colleague to whom he had taught his method of notation and who subsequently added further compositions to it.

In the one surviving manuscript the notations are preceded by the treatise, and it is clear that whatever was presented to Aḥmed III was not this particular copy of the text, for it lacks any dedication or eulogistic preamble. One might also have expected someone of Cantemir's status to have commissioned a calligrapher and perhaps also an illuminator to prepare the presentation copy, but the text as we have it, in a clear and bold but not particularly elegant hand, is presumably an autograph. The treatise is often given, for ease of reference, the generic designation *edvār* ('[Book of] cycles'), a practice which will be followed here. It has, however, the disadvantage of diverting attention from the very explicit and at the same time unusual title that Cantemir himself chose, *kitāb-ı 'ilm-i mūsīḳī 'alā vech ül-ḥurūfāt*[30] ('Music theory through notation'). But although this underlines the clear conceptual link between the treatise and the appended notations, the importance of the *edvār* does not reside in the relatively small, if indispensible, amount of factual guidance it gives towards establishing and confirming a correct reading of those notations. Rather, it is an extensive and wide-ranging document providing information available from no other source on the conceptualization of the seventeenth-century Ottoman art-music tradition: it outlines salient features of the pitch system; delineates the structure of individual modes; gives a precise description of the rhythmic cycles; provides an analytical survey of the major instrumental and vocal forms; explores concepts of modulation in the particular context of the improvised instrumental taksim; and, for the first time, describes the arrangement of the large-scale cyclical forms, the vocal and instrumental fasıl.

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[29] Both the anecdote (for which no authority is given: it does not come from the *History*) and the putative composition are to be found in Burada, op. cit., pp. 62/140-65/143. There is no suggestion that this musical offering coincided with the presentation of the treatise, which may well have taken place somewhat earlier. The style of what now passes for the piece in question is at some remove from the compositional norms of Cantemir's day, and the thorny question of what might justifiably be ascribed to him from among the corpus of compositions that bear his name today is one that can only be approached after analysis of the collection as a whole. It will be addressed, briefly, in the Appendix (at 5.4).

[30] In the original (p. 1) *ḫurūfāt* (Cantemir quite often writes *ḫ* in place of an etymologically correct *ḥ*).

To explicate and evaluate this work as a whole lies beyond the scope of the present study, still less to trace the nature and extent of its impact on later theorists, even if it is clear that its influence, albeit rarely acknowledged, has been extensive and profound, lasting at least until the second half of the nineteenth century.[31] All that can be attempted here is to review those aspects most directly helpful to an understanding of the notations. They will be considered at the appropriate juncture, so that it is specifically the introductory material on pitch, scale and mode that will be commented on in this section.

1.3.1 *Background*

That a work of such richness must contain echoes of earlier formulations is obvious, yet even in the one area where Cantemir explicitly acknowledges his indebtedness by reproducing material from elsewhere it is by no means easy to pinpoint the exact source(s), and in general the *edvār* is rather difficult to situate within the tradition of writing on the theory of music in the Islamic Middle East. The so-called Systematist school, which dominated the field from the early thirteenth century until the end of the fifteenth, had by Cantemir's time long since vanished from the scene, leaving behind little more than the names of one or two authors who had become legendary as composers but whose theoretical works were largely if not completely forgotten.[32] Particularly striking is the complete disappearance from later treatises, the *edvār* included, of a major element in Systematist writing, the mathematical analysis of intervals and the consequent definition of the tetrachord species, which were perceived to be the basic building blocks of the modal system, in ratio form (the Pythagorean diatonic tetrachord, for example, being expressed in terms of the intervals 9/8 9/8 256/243).

That later writers may have felt this to be complex and needless ballast need occasion no particular surprise. But that they should also have jettisoned the neat and efficient form of alphabetic-cum-numerical notation by which scales had been defined in Systematist treatises in favour of cumbersome circumlocutions is much harder to credit, so that one may suspect either a break in the tradition, with the later texts being written largely by practising musicians lacking the intellectual formation of their forbears and being simply unacquainted with earlier theory or, more likely, the coexistence of parallel streams of theoretical discourse, with one

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[31] For a full account of the manuscript and its contents see E. Popescu-Judetz, *cartea*. For later reworkings of material from the *edvār* within the Ottoman tradition see E. Popescu-Judetz, *Meanings in Turkish musical culture*, Istanbul: Pan Yayıncılık, 1996, pp. 77-80. Cantemir's influence is still discernible in the mid-nineteenth century: works dated 1279/1863 (*teşrīḥ-i maḳāmāt-ı mūsīḳī*, İstanbul Üniversitesi Kütüphanesi MS TY 804) and 1864 (Haşim Bey, *mecmū'a*) are still heavily reliant upon him; and as late as 1881 P.G. Keltsanides (*Methodike didaskalia theoretike te kai praktike*, Istanbul) was proclaiming the importance of Cantemir's work for an understanding of Greek music (I am indebted to Dr. R.M. Jäger for this reference).

[32] Ṣafī al-Dīn al-Urmawī (d. 1294), the earliest Systematist theorist, and, in particular, 'Abd al-Qādir al-Marāġī (d. 1435), both of whom figure prominently as composers in fifteenth- and sixteenth-century song-text anthologies.

surviving long after the other, for reasons that are not wholly clear, had disappeared. Preference for the second interpretation is justified not merely because it accords less well with the unthinking assumption of long-term intellectual decline or, at best, stasis, but also because it accounts more readily for the production, already during the fourteenth and fifteenth centuries, of a number of texts which may well make ritual obeisance to the authority of al-Urmawī, but ignore the analytical content of Systematist theory in favour of providing a codification of the modes the essential characteristic of which is less musicological than cosmological: its various ramifications are articulated around the core structure of the zodiac, and it projects derivational relationships that are seemingly arbitrary to the extent that they do not accord with any observable criteria of intervallic structure or other modal features.[33]

An unhelpful characteristic of various similar texts that are presumed to be later is that for the most part they are difficult to date. They usually lack a colophon, and when not anonymous are often by obscure authors, so that there are few treatises that can be assigned with any confidence to the sixteenth and seventeenth centuries. In any case, the treatises that have the most obvious affinities with the *edvār* are not among them and it is, therefore, not readily demonstrable that they are earlier and could have served as models.[34] The fact that these texts are in either Arabic or Persian also raises the question of what theoretical writings were available—and for Cantemir presumably more readily accessible—in Ottoman Turkish. But those that are extant[35] have less rather than more in common with the *edvār*;[36] and the one contemporary work that has often been considered a likely potential influence, the hitherto inaccessible treatise by Nāyī 'Oṣmān Dede, has recently been revealed to be just as distant as earlier Ottoman writings.[37] The reason for suspecting that Cantemir may have been familiar with it is not merely its proximity in time, but the fact that Nāyī 'Oṣmān Dede also developed a similar system of notation. It might be argued that Cantemir could have conceived his own on the basis of the model provided by Systematist texts, but there is no evidence that he consulted these, and the parallels with Nāyī 'Oṣmān Dede's system are sufficiently close to make it too much of a coincidence for the two to have been created in total isolation one from the other, even if the relationship between them may have been one of emulation rather than derivation.[38] But whether or not Cantemir was indebted to his older contemporary on the notation side, it is now clear that Nāyī 'Oṣmān Dede's verse treatise (incidentally in Persian), which deals with mode names, groupings, and a few abbreviated modal definitions, can have exerted no influence upon the development of Cantemir's own ideas. Indeed, Cantemir is quite contemptuous of those who have written on music, claiming not only that their knowledge is purely practical but that they actually dismiss theory.[39] This remark should not necessarily be taken at face value, but it is certainly possible that he gained as much from the views of his fellow musicians as he did from whatever texts he may have consulted.[40]

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[33] An early fourteenth-century model for such verbal descriptions is provided by the treatise by Ibn Kurr, *ġāyat al-maṭlūb fī 'ilm al-anġām wa-'l-ḍurūb*, BL MS Or. 9247. The cosmological association of the main set of twelve modes (*šudūd*) with the signs of the zodiac first appears in al-Ḫaṭīb al-Irbilī, *urjūzat al-anġām* (written 729/1328), *al-mašriq*, 16, 1913, 895-901.

[34] The difficulties of dating emerge clearly from the useful preliminary survey of the internal relationships between a group of such texts made by A. Shiloah, *The theory of music in Arabic writings (c. 900-1900). Descriptive catalogue of manuscripts in libraries of Europe and the U.S.A.* (Répertoire international des sources musicales: B X), Munich: Henle, 1979, no. 302.

[35] For a general bibliographical survey see G. Oransay, *Die traditionelle türkische Kunstmusik*, Ankara: Küğ-Veröffentlichungen, 1964, and O. Akdoğu, op. cit.

[36] With respect to the specific area of modal description, a very clear indication of the contrast between Cantemir and his predecessors (and successors too, for that matter), is provided in G. Oransay, *melodische Linie*, pp. 83-5, where are juxtaposed descriptions of the makam uzzal taken from ten different sources from the mid-fifteenth to the mid-nineteenth century. That by Cantemir is much the longest and most detailed.

[37] Nâyî Osman Dede, *Rabt-ı tâbirât-ı mûsıkî*, transcribed F. Harirî, ed. O. Akdoğu, 2nd impr., Izmir, 1991. Like the *edvār*, this work is dedicated to Aḥmed III, and could therefore have postdated it.

A list of the notational symbols that Cantemir employs in his collection (displayed in Part i) is set out in the *edvār*. But he does not, strangely, have recourse to this much more efficient method of presentation in his analysis of the structure of individual modes, using instead verbal descriptions of melodic movement within which are embedded not symbols for but the names of the various pitches—exactly the type of description found in the earlier texts mentioned above and, presumably, that used by his contemporaries in their verbal definitions. Where Cantemir departs quite radically from the thematic range of the antecedent literature is in simply ignoring the whole tradition of cosmological speculation, represented in its most extreme form in one of the earliest extant Ottoman texts, the treatise by Seydī,[41] where the whole first half is concerned with cosmology. He may on occasion resort to an astronomical metaphor, but there is now no trace of the complex series of associations which provided a rationale for integrating music into a world of cause and effect, so that it could have ascribed to it, say, ethical and therapeutic properties: he nowhere makes equations of the traditional type according to which mode *a* corresponds to heavenly body *x*.[42]

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[38] Nāyī 'Oṣmān Dede used his notation to record some 70 instrumental pieces. E. Popescu-Judetz, the only scholar to have had access to this manuscript, which remains in the private domain, notes its contents and compares the two systems of notation (*Meanings*, pp. 31-5). Their general principle is the same, and although in many cases quite different letter combinations are chosen there are also several pitches for which they use the same symbols.

[39] *edvār*, p. 17: بلكلكى بو أنه دكن شرخ مقاماتى وادوار موسيقىء ايجاد وپيدا ايدنلر يالكز عملى كوروب قواعيد علوم وشروط قوانون (كذا) اوزره بر نسنه تصنيف ايتممشلر ... علمى انكار ايدوب عمله قناعت قلمشلر .

[40] Relevant here is to note that the material explicitly repeating earlier definitions (pp. 68-77) is introduced not by a reference to any specific textual source or sources but by the phrase *rivāyet ederler ki* ('it is related that'), which suggests oral transmission, and the authority then referred to is not any known theorist but a construct at once mythical and vague.

[41] *hāẕā el-maṭla' fī beyān el-edvār ve-'l-maḳāmāt ve fī 'ilm el-esrār ve-'l-riyāżāt*, Topkapı Sarayı, Ahmet III, no. 3459.

[42] The omission was clearly deliberate, as he was certainly aware at least of the traditional linkage between a group of twelve makams and the signs of the zodiac (*Systema de religione et statu Imperii turcicii* (*Sistemul*, tr. V. Cândea), loc. cit.), and one can detect the faintest after-echo of this form of conceptualization in his comparison (*edvār*, p. 78) of the four basic percussion symbols with the four elements. But more striking is to note that where (*edvār*, pp. 6-7) he does launch into an extended cosmological simile the context is again, unexpectedly, rhythm rather than mode, and the causation rational rather than magical: عارضى اولان وزن موسيقى / بورجلر ايچنده حركت شمس كبى كه هر بر درجه ده بنوب اينمه سى ايله قمر التنده اولان هوانك تبديل وتغير اولسنه سبب اولور . ('Supplementary beats are like the motion of the sun across the constellations, which with each degree it ascends and descends causes change and alteration to the sublunary atmosphere.')

1.3.2 *Contents*

The following is a brief chapter-by-chapter outline sketch of the contents of the *edvār*: the information supplied on core areas will be examined in more detail below under various thematic heads:

Chapter 1 ('Defining notes' (*işāret-i perdehā-yi mūsīḳī*)), pp. 1-16, is both long and wide-ranging. But it begins without an introduction or any indication of the scope of the treatise or the reasons for its composition: Cantemir plunges straight into practicalities, and further betrays his distance from his major Systematist predecessors by making no attempt whatsoever to offer initial definitions, whether of the nature of music itself, of the concept of a note, or of the size of the intervals which constitute the general set of pitches with which he is initially concerned. We are simply presented with a list of the names of the notes of the gamut, and there follows a corresponding list of the symbolic shorthand representations of these various pitches which (although this is not said) will subsequently be used in the notations. Using these symbols, Cantemir then distinguishes (p. 2) between 'complete notes' (*tamām perdeler*) and 'incomplete notes' (*nā-tamām perdeler*)—for which terminology 'main notes' and 'secondary notes' will be substituted henceforth—and adds another classification according to octave register. Reverting to the main vs. secondary discrimination, further comments are made on functional differences and relationships between specific pitches. The next section ('Introduction to musical notation' (*medḫal-i 'ilm-i ḥurūfāt-i mūsīḳī*), p. 5) emphasizes the need to represent also duration, in order to reflect the rhythmic cycle, and introduces a concept which, much earlier, had been standard in theoretical writing, that of an unvarying underlying pulse (*vezn-i ṣubūtī*).[43] There is, finally, a reference to the potential of notation for accuracy of transmission.[44] The ensuing section (pp. 8-16) is concerned with introducing and describing in some detail the three notational codes for duration discussed in Part i, *vezn-i kebīr*, *vezn-i ṣaġīr* and *vezn-i aṣġar uṣ-ṣaġīr*, and with providing representative examples.

The importance of the topic of notation is further underlined by the fact that it is only after it has been expounded at length in Chapter 1 that we come, in Chapter 2 (pp. 16-21), to an introduction to the science of music in general (*dībāce-i 'ilm-i mūsīḳī*). This begins with the claim that the topic is limitless (*ġayr-i nihāyet bir 'ilmdir*), in favour of which is argued the existence of infinite creative possibilities at the level of the *terkīb*, although at this stage no definition is offered for this term. To conclude the first section (p. 17), there is a brief discussion of the defects of previous scholarship, which for Cantemir was concerned solely with surface description and ignored underlying causes and systems, followed by a statement of his intention to define first music (*mūsīḳī*) and then its key constituents *perde*, *aġāze*, *naġme*, *terkīb* and *maḳām* before turning to an analysis of individual modes.

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[43] It is first elaborated by al-Fārābī, *kitāb al-mūsīqī al-kabīr* (ed. Ġaṭṭās 'Abd al-Malik Ḫašaba; rev. and intro. Maḥmūd Aḥmad al-Ḥifnī), Cairo: dār al-kitāb al-'arabī li-l-ṭibā'a wa-'l-našr, [1967], pp. 438-40.

[44] Since it allows the piece to be performed as the composer intends: ورقم وزن ايله خرفك التنده بند ايدوب لازم اولان پشروى ياخود بستهء شرط مصنّف اوزره اوقورز . / Precisely the same point about fidelity to authorial intentions had been made by al-Marāġī in his discussion of notation (*jāmi' al-alḥān*, ed. Taqī Bīniš, Tehran: Mu'assassa-i muṭāla'āt wa-taḥqīqāt-i farhangī, 1366/1987, pp. 237-8.)

This programme is then carried out in two sections devoted to definitions (*ta'rīf*), the first (p. 18) termed general (*'alā vechi 'l-'umūm*), the second (pp. 19-21) particular (*'alā vech-i maḫṣūṣ*).[45] The former, accordingly, deals with music itself, defined as a melodic movement, rhythmically organized, limited in duration and arriving at a particular final cadence, which gives pleasure to the sense of hearing.[46] Various arguments are then put forward in defence of this definition, stress being laid on the guiding principles of modal and rhythmic structures. The latter then reintroduces the above list of key terms, adding to them references to forms (*beste*, *peşrev*) and rhythm, although these last do not reappear in the subsequent definitions, which provide an ascending hierarchy from note, through undefined melodic movement, to the final form of a completed melody to which can be assigned a particular modal identity. The definition of the term makam itself (pp. 20-1) is not so much of the concept (which is, in effect, the precipitate of the previous definitions) as of the various types or subdivisions that Cantemir recognizes: there is first a binary division into 'simple' (*müfred*) and 'compound' (*mürekkeb*), and then other categories are distinguished: high-register modes (*maḳām fī perde-yi a'lā*), transposed modes (*şedd-i maḳām*), pseudo-modes (*ṣūreta maḳām*) and marginal modes (*mevcūd ül-isim ma'dūd ül-cisim*).

Chapter 3 (pp. 22-32) is the first of a group of four which map out the structures of the individual modes. Setting the programme for this core block, it has the comprehensive title 'The number and names of the modes' (*'aded ve-tesmiye-i maḳāmāt*), set centre-page, with, surrounding it, an additional second general title 'The musical modes according to the author' that both invokes tradition through the use of the term *edvār-i mūsīḳī* and at the same time stresses that the definitions to come are Cantemir's own (*'alā ḳavl-i ḥaḳīr*) and therefore potentially non-traditional. The first page enumerates the makams according to a sevenfold categorization congruent but not identical with the above, and also lists those terkibs generally considered makams, after which the remainder of the chapter analyses the makams belonging to the first and evidently most important category, those on low-register main notes.

The following chapters cover the other categories: Chapter 4 (pp. 33-45) deals with the high-register makams,[47] those using secondary notes[48] (which make up a further two of the seven) and the compound makams, while Chapter 5 (pp. 45-50) covers the pseudo and marginal categories, and also discusses transposition; and Chapter 6 (pp. 50-5) rounds off the group by giving a comparable account of the structure of those terkibs which are commonly categorized as makams.

In Chapter 7 (pp. 56-67) we move to the broad topic of modulation, beginning with the concepts of consonance and dissonance indicated in the title (*ḥiss-i ünsiyet ḍıdd-ı 'arbade-i mūsīḳī*). This assesses both vertical relationships (consonances at the octave, fourth and fifth; and also dissonant intervals) and linear movement, whether from note to note or mode to mode, including a catalogue of modes listing for each those for which it lacks affinity.[49] The point is made that mastery of such relationships is necessary in order to create multiple modulations, and the chapter concludes with an outline route map of a complex modulating taksim.

Chapter 8 (pp. 68-77) quotes from earlier authorities, giving mode lists and abbreviated definitions. These are occasionally useful in relation to certain terkibs so marginal that Cantemir fails to provide a description, but do not otherwise need to be taken into account.

Chapter 9 (pp. 78-86) deals with the rhythmic cycles, first listing them and then providing definitions in the form of circles around which are inscribed both the quality and the duration of the various attacks.[50]

From p. 86 there is a gap in the pagination, the next page being numbered 97, and even if Chapter 9 actually ends at p. 86 it is clear that material has been lost, for p. 97 begins with the heading not of a chapter but of a section, 'The fasıl and musical performance according to form' (*faṣıl ve icrā-yi mūsīḳī 'alā vech-i nev'*). The forms considered are first the vocal genres *taḳsīm*, *beste*, *naḳış*, *kār* and *semā'ī*, and then (p. 102) the instrumental *taḳsīm*, *peşrev* and *semā'ī*, after which Cantemir reverts (p. 103) to the vocal *şarḳı* before enumerating the various elements making up first the vocal fasıl (the above vocal genres, in the order given, but without the şarkı), then the instrumental (again, the three genres in the order given), and finally the rather more formal (*faṣl-ı meclis*) combination of the two, which consists of the core vocal fasıl framed, with intervening pauses, by the instrumental fasıl, now separated into two parts, and of one further element to conclude. The whole sequence thus consists of: instrumental taksim, one or two peşrevs, pause, vocal taksim, beste, nakış, kâr, semai, pause, instrumental semai, and a final vocal taksim with instrumental bourdon accompaniment.

The final and quite extensive section (pp. 105-141) is made up of indexes and tables, aspects of which will be considered in 5.2 and 3.7 respectively.

1.3.3 *Pitch*

The first subject to be treated in the *edvār*, pitch is dealt with essentially by enumeration rather than definition: the text supplies no information, at this point anyway, about relative interval sizes, so that the values implied by the representations given here are extrapolations.[51] Cantemir first lists in ascending sequence 30 notes spanning a two-octave + wholetone gamut (from *yegâh*, *D*, to *tiz hüseyni*, *e'*) which are at the same time the names of the open string (*yegâh*) and the various frets on the tanbur that produce them. This might suggest the notion of an abstract pitch set (*Generalleiter*), but it is important to observe that already at this initial stage Cantemir introduces a hierarchical distinction, indicating graphically that certain notes are of secondary status.[52]

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[45] i.e. the section heading which is given by Cantemir himself, and later Toderini, as the title of the treatise he presented to Sultan Aḥmed.

[46] موسيقى آوازك حركتيدر كه وزن اصول اوزره زمان موقّت ايله مكان محدوده قرار واستراحت ايدوب قوّت سامعه يه لطافت كتور[ر] .

[47] Here called *maḳāmāt fī perdehā-yi tiz.*

[48] Here called *el-maḳāmāt el-niṣf el-perdehā.*

[49] Cantemir characterizes the relationship as one of 'coldness' (*bürūdet*). It is interesting to note that the modern Turkish equivalent, **soğukluk**, is also used in relation to jarring modulations (personal communication from Cem Behar).

[50] Further details are given in the Introduction to Part i, pp. xix-xxi, where it is also pointed out that this chapter is incomplete, pp. 81-2 being missing.

[51] See Part i, Introduction, pp. xiv-xviii.

There follows a list of symbols for the various pitches which contains not 30 but 33 entries, for it includes *c‡*, *d‡* and *c‡'*, absent from the fretting. The rather opaque linking comment implies not that these are extra pitch discriminations required over and above the basic tanbur fretting, but that for secondary notes more names than frets are needed, different names being used in different melodic contexts.

Using these 33 symbols, Cantemir then (p. 2) distinguishes between main notes (*tamām perdeler*) and secondary notes (*nā-tamām perdeler*). The former are stated to be 16 in number, being listed as:

D E F♯ G A B𝄳 c d e f♯ g a b𝄳 c' d' e'

while the latter are stated to be 17 in number, and are listed as:

F F‡ G‡ B♭ B d♭ e♭ d‡ f f‡ g‡ b♭ b d♭' c‡' e♭'

that is, with *c‡* omitted. One further note (and symbol) is then mentioned, *C*, which on the tanbur has to be produced by stopping a lower-pitched string.[53]

There follows a section providing a different classification, this time dividing notes into three types (*nev'*) according to register. Thus among the main notes, *D E F♯ G A B𝄳 c* are classified as low register (*nerm*), *d e f♯ g a b𝄳 c'* as high second register (*tiz ikinci perdede*) and *d' e'* as high third register (*tiz üçüncü perdede*); and reference is again made to *C*, which is assigned to an extra-low register (*ikinci perdede nerm*). The evidently implicit notion of octave reduplication is then spelled out, the notes from *D* to *d* being regarded as primary, with *d* marking the commencement of the second register.

Cantemir next (p. 3) seeks to distinguish between the main and secondary note sets, observing that in the former whether one moves up, e.g. from *A* to *B𝄳*, or down, e.g. from c to *B𝄳*, one arrives at the same note, whereas in the latter one may not, for e.g. the next secondary note up from *d* is *e♭*, while the next secondary note down from *e* [the next main note above *d*] is [not *e♭* but] *d‡*. Important here is not the bizarre logic of this proposition, but what it reveals of the status of the main notes, their importance being such that in dealing with them as a set the existence of intermediate secondary notes can be ignored, while when dealing with the secondary notes as a set the notion of excluding the main notes is not even entertained.

The various pitches are then (pp. 3-5) reviewed in ascending order, starting from *D*. The

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[52] By writing beneath them *nim* ('half').

[53] بونلردن ما عدا بر پرده دخی يكاهك اوزرينده وضع اولنور كه نرم چاركاه پرده سی اولور ها اشارت مرقومك طنبورده پرده سی اولمغله لازم كلور كه دوكاهك اهنك تلنه باصوب راست پرده سينك اوزرينده نرم چاركاه صداسی اجرا اولنور .

Exactly the same definition is given again, in only slightly varied form, on the following page. In relation to a main melody string tuned to *yegâh*, represented here as *D*, another tuned to (the octave below) *dügâh*, *A*, would yield *D* if stopped at the *rast* fret, a fourth above the open string: what is needed is to stop it at the minor third (*acem aşiran*) fret, and the phrase *rast perdesiniñ üzerinde* must be understood accordingly, as a circumlocution for the appropriate fret 'above' *rast* on the string, that is, lower in pitch. Although not mentioned in the expository material, it emerges from the discussion of individual makams that there was also an occasional call for *C‡*, which likewise could not be produced on the main melody string of the tanbur.

absence of a secondary note between *D* and *E* is attributed to the non-existence of any mode needing one, and comment on *F* is also mode-specific: normally called acem aşiran, when used in the context of the makam ırak it has, rather, the status of a cadential grace note.[54] That name is determined by function is again emphasized in the next remark, to the effect that in relation to ırak the next secondary note (*F‡*) has no name, i.e. it is never used in this context, whereas in descending from *G* (i.e. in the context of the makam rast) it is called rehavi-yi cedīd (although previously it had been referred to simply as rehavi). Below *A*, as we would expect from the previous list, is *G‡*, called zengüle, but Cantemir also mentions a hypothetical pitch above *G* which he terms a transposition (*şedd*) of saba, *d♭*, suggesting therefore the value *A♭*. The differing functions defined for *F* then recur in relation to *B♭*, called nihavent if the secondary note above *A*, but not if the cadential grace note (*tetimme*) below *B𝄳*, in which function it may be called maye. Even greater terminological variation occurs above *B𝄳*: the one fret between *B𝄳* and *c*, which Cantemir always symbolizes by the first letter of the name buselik, is called rehavi-yi 'atīḳ when considered a secondary note above *B𝄳*, but buselik in relation to *c* and nişabur in relation to *c‡*, evidently pointing to the principal modal affiliations of the intervals *B* - *c* and *B* - *c‡* respectively. The discussion of *F* is repeated for *f*, which is termed according to context acem or, in relation to *f♯*, the *tetimme* of eviç. On the remaining and somewhat abbreviated material the only point worth noting is the inadvertent omission of any reference to *f‡* as mahur.

1.3.3.1 *Interval sizes*

The notes symbolized by these 33 signs, Cantemir says, encompass the whole range of *naġme*, *aġāze*, *terkīb* and *maḳām*. But before turning to the meaning of these terms it might be helpful to go back over one or two points about the intervals to which the note symbols correspond. These are nowhere defined by Cantemir, but a number of uncontroversial conclusions can still be reached, and a general outline has been provided in Part i.[55] Within the main-note set the one problem concerned the intonation of *B𝄳* and *f♯* (and their corresponding octaves), but fortunately the lengthy further discussion threatened in the Introduction to Part i can now be dispensed with thanks to Feldman's detailed examination of the issues involved, and the main points may be summarized briefly as follows:[56]

If we begin by accepting the representation of yegâh by *D* as an arbitrary convention derived from modern Turkish notational norms it seems sensible to make a further gesture towards modern habits by representing the remaining main notes of the octave as *E F♯ G A B𝄳 c*. But there are no grounds for assuming that the seventeenth-century intonation of

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[54] The term used is *tetimme* 'supplement'. The translation 'leading note' would not be wholly appropriate since, as Cantemir is at pains to point out in a clarificatory comment, this extra note is introduced as a cadential elaboration after the finalis has been reached:

اكر عراق پرده سندن نرمه واروب نيم پرده ده باصرسك اول زمان عجم عشيرانی اولمز وتتمهء پردهء واغازهء عراق اولور. اكاه اولكی تتمهء پرده اولدر كه بر پرده نك قرارينه واريلدوغی زمانده التنده اولان نيم پردهء دوقنوب كنه تمام پرده ده قرار قلر وتمام پرده نك مقامی اجرا اولنور .

[55] Introduction, pp. xiv-xviii (which includes a list of Cantemir's note names and symbols).

[56] op. cit., pp. 202-13, 216-7.

F♯ and *B*𝄬 was the same as that of their modern Turkish counterparts. Cantemir here uses only one symbol to cover an area where modern Turkish practice distinguishes three discrete pitches, and his ṭanbur, like the modern Persian setar, had only one corresponding fret. It seems clear that this was placed more or less at the intermediate modern value (which is considered, in relation to a theoretical whole tone of 9 commas, to be 2.5 commas flat), and produced approximate threequartertone intervals in relation to the neighbouring main notes (*E* - *F*♯ - *G* and *A* - *B*𝄬 - *c*). We thus have a main-note set incorporating neutral intervals and resembling both contemporary Persian and Arab norms and those that can be disengaged from the earlier theory. Accordingly, if we use the current Persian symbols *koron* (𝄳) and *sori* (𝄲) to indicate, respectively, a lowering or raising by an approximate quartertone, the intervallic values of the *G* - *g* rast scale of Cantemir's day can be represented as:

G	*A*	*B*𝄳	*c*	*d*	*e*	*f*♯	*g*
1	2	3𝄳	4	5	6	7𝄳	1'

and assuming that the secondary notes flanking 3𝄳 and 7𝄳 are approximately a quartertone higher or lower (and therefore a semitone below or above the next main note) we arrive at:

1 2 3♭ 3𝄳 3 4 5 6 7♭ 7𝄳 7 1'

where the divided whole tones, e.g. 2 - 3 (*A* - *B*) or 3♭ - 4 (*B*♭ - *c*), consist of a semitone and two quartertones, in the first case ascending, in the latter descending.

These values seem relatively secure. Problems arise, rather, with the other wholetones where there are two internal divisions, for here values are less easy to establish. In the case of *G* - *A* we are offered both a secondary note below *A*, called zengüle, and a hypothetical note above *G*, but when we turn to, say, *c* - *d* and *d* - *e* there appears to be nothing hypothetical about the existence of a secondary note above *c*, called saba, alongside another below *d*, called uzzal, or of a secondary note above *d*, called beyati, alongside another below *e*, called hisar. It might be thought, by analogy, that, say, the series *c* - saba - uzzal - *d* and *d* - beyati - hisar - *e* should correspond either to 1 2♭ 2𝄳 2[57] or, conceivably, to 1 1𝄲 2♭ 2:

1	2♭	2𝄳	2	1	1𝄲	2♭	2
c	*d*♭	*d*𝄳	*d*	*c*	*c*𝄲	*d*♭	*d*
d	*e*♭	*e*𝄳	*e*	*d*	*d*𝄲	*e*♭	*e*

but there is little evidence to support such a view, and more that runs counter to it.[58]

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[57] Feldman makes the same point, but the following discussion follows a rather different course from his (op. cit., pp. 213-6), and is consequently more detailed than hitherto.

[58] It might be argued that Cantemir's account of transposition (pp. 39-40) implies that *d* - beyati - hisar - *e* should correspond to 1 2♭ 2𝄳 2, for it speaks of a transpositional relationship between rast (*G*) and çargâh (*c*), so that corresponding to *G* - *B*𝄳 one should encounter *c* - *e*𝄳. However, such evidence is inconclusive, for it may be that Cantemir is speaking rather of a cross between transposition and modulation, in which case there need be no such implication. His series of relationships includes, for example, acem (*f*) and buselik (*B*), and it is inconceivable that he means that the core scale of acem, *A* *B*𝄳 *c* *d* *e* *f*, was to be, or indeed could be, transposed down an augmented fourth, so that what is probably to be understood in this case is that the scale of buselik, suitably extended into the lower register, would allow acem to be transposed down a perfect fourth.

Assuming that both wholetones had the same internal structure, the second arrangement of intervals can certainly be excluded, for among the perfect fourth and fifth relationships listed by Çantemir (pp. 56-7) we find sünbüle (*b*♭) and beyati, which must therefore be *e*♭ and not *d*𝄲. With regard to the 1 2♭ 2𝄳 2 arrangement we may begin by observing a distributional contrast: whereas the sequences *A* *B*♭ *c* and *A* *B*𝄳 *c* both occur, one may note a tendency for beyati (*e*♭) to occur between *d* and *f* to the exclusion of hisar.[59] A further and more crucial mismatch is that whereas e.g. *B*♭ and *B*𝄳 (that is, 2♭ and 2𝄳 within the *A* - *B* wholetone) may co-occur in certain contexts, this never happens with the pitches called saba and uzzal or those called beyati and hisar, and one reason that suggests itself is that the interval between them was too uncomfortably small for them to be juxtaposed. It is interesting to observe in this connexion that when (p. 58) giving an example of a dissonant succession of notes Cantemir begins *A* - *B*♭ - *B*𝄳 - *B*, including every possible step, but then continues *c* - uzzal - *d* - beyati - *e*, omitting saba and hisar, possibly because the idea that they might co-occur with uzzal and beyati respectively was simply too outlandish. Accordingly, it would be reasonable (and also, incidentally, in conformity with modern Turkish norms of analysis, if not of nomenclature) to think of these two wholetones not as parallel to those with a 1 2♭ 2𝄳 2 internal structure, but as divided optimally into L (limma) + C (comma) + L:

c *d*♭ (saba) *c*𝄲 (uzzal) *d* *e*♭ (beyati) *d*𝄲 (hisar) *e*
L C L L C L

In the absence of any positive definition of interval sizes further evidence that such may have been the case again needs to be sought in Cantemir's material on consonant relationships, some of it implied in his treatment of transposition. Unfortunately, the latter turns out to be inconclusive, despite the fact that the framework is primarily of straightforward relationships at the fourth or fifth, as exemplified by the first secondary-note pair (p. 50), nihavent and acem, which clearly points to a perfect fifth relationship between *B*♭ (nihavent) and *f* (acem). The series also includes uzzal and şehnaz, and uzzal and zengüle, again pointing to perfect fifth (*c*𝄲 - *g*𝄲) and perfect fourth (*c*𝄲 - *G*𝄲) relationships, but as it fails to offer any anchorage for these to one of the main notes the size of, say, the *c*𝄲 - *d* interval cannot be determined. Disconcertingly, however, the second pair, which immediately precedes uzzal and şehnaz (*c*𝄲 - *g*𝄲), is saba and şehnaz (*d*♭ - *g*𝄲),[60] and that this is not just an aberration is shown later by the inclusion in the list of consonant relationships (p. 57) of hisar - nihavent (*d*𝄲 - *B*♭). These two cases thus seem to indicate either that Cantemir was prepared to include in his scheme fourths and fifths that were a little less than perfect, or that rather than being small the interval between saba and uzzal and beyati and hisar respectively was in fact non-existent, in other words that these pairs provided no more than contextually determined terminological variants for the same pitch. It would be tempting to cite in support of the latter conclusion the analyses of the makams, where saba is defined (p. 36) as the half note (*nim perde*) between *c* and *d*, uzzal (p. 39) as the half note between *d* and *c*, beyati (p. 37) as the half note between *d* and *e*, and hisar (p. 39) as the half note between *e* and *d*. But as buselik (*B*) is similarly described as the half note between *c* and *B*𝄬 the half-note terminology cannot be taken as a precise indication of interval size (the point rather is the order or direction of the definition, the second member being in each case the pitch which the note being defined replaces in the eponymous makam). Nevertheless, it is certainly the case that elsewhere Cantemir does provide alternative names for the same note (e.g. maye for nihavent), and even more telling is to recall the reason for his omission of *c*‡, *d*‡ and *c*‡*'* from the initial statement of the global pitch set, which suggests that as in the above definitions of the half notes the direction of the melody dictated which name should be used for them, so that there was a surplus of symbols to pitches. Accordingly, over the two octave *D* - *d'* range one could postulate a system with rather fewer functional (i.e. phonemic) pitch discriminations than symbols and names, with several whole tones being divided simply into two semitones (indicated in table 1 arbitrarily by 1 2♭ 2):

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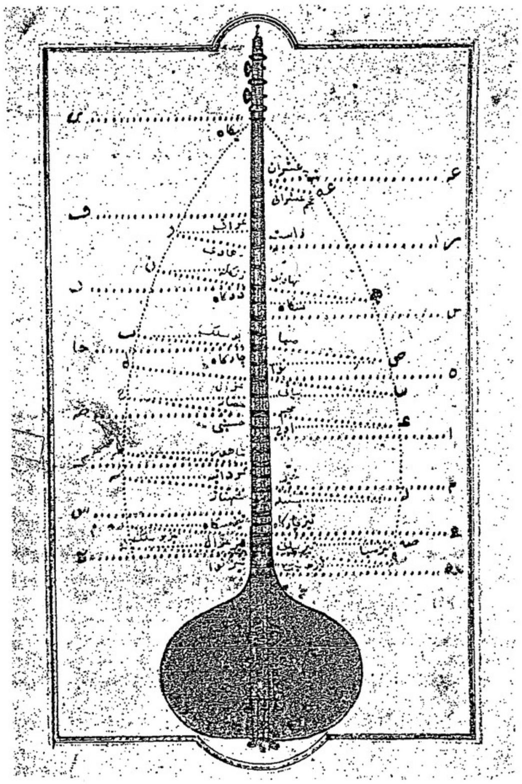
[59] While hisar generally occurs between *c* and *e* to the exclusion of *d*, and often appears to function as a leading note to *e*.

[60] Cantemir distinguishes the two pairs by the direction of the relationship, uzzal and şehnaz descending, saba and şehnaz ascending.

D	yegâh	*d*	neva
		e♭	beyati = hisar (*d*‡)
E	aşiran	*e*	hüseyni
F	acem aşiran	*f*	acem
F♯	ırak	*f*♯	eviç
F‡	rehavi (-yi cedīd)	*f*‡	mahur
G	rast	*g*	gerdaniye
A♭	(şedd-i saba) = zengüle (*G*‡)	*a*♭	(Ø) = şehnaz (*g*‡)
A	dügâh	*a*	muhayyer
B♭	nihavent/maye	*b*♭	sünbüle
B𝄬	segâh	*b*𝄬	tiz segâh
B	rehavi-yi 'atīḳ/buselik/nişabur	*b*	tiz buselik
c	çargâh	*c'*	tiz çargâh
d♭	saba = uzzal (*c*‡)	*d*♭*'*	tiz saba = tiz uzzal (*c*‡*'*)
		d'	tiz neva

Table 1

There is nothing intrinsically odd in, say, *d*♭ having one name in the context *c* - *d*♭ (which excludes *d*), and another in the context *d* - *d*♭ (which excludes *c*), but it may well have been the case that slightly different intonational norms were felt appropriate to each, and it would make quite reasonable sense for most of the repertoire to think in such instances of a single semitone fret on the tanbur the position of which could be adjusted (by, say, a comma up or down) to arrive at the optimum value for the mode in question. Later such differences would crystallize into discrete pitches with a fret each, and it is tempting to deduce from Cantemir's own tanbur illustration (fig. 2) that this development had already taken place, for it includes uzzal alongside saba and hisar alongside beyati. But within the *c* - *e* range the number of note names is in excess of the number of frets marked in on the neck of the instrument, and it



Cantemir's tanbur illustration

may be added that the illustration also includes tiz uzzal as well as tiz saba, for which separate frets were unlikely to have been introduced before the second half of the eighteenth century.[61] There is, therefore, nothing here to contradict the information, given on the very first page of the treatise, that the fretting of the tanbur as Cantemir knew it did not include more than one secondary note between each two main notes.[62]

To revert to the pitch symbols used in the transcriptions, one final clarification is needed. Within the set of main notes ♯, which occurs only with *F* and *f*, denotes an approximate quartertone raising, but elsewhere there are a few instances where it appears with *A* (*A♯* being used as an equivalent for *B♭*) and *e* (*e♯* being used as an equivalent for *f*), and here ♯ denotes a semitone raising.[63]

1.3.4 *From note to mode*

If one or two details are debatable the broad picture of Cantemir's intonational standards thus seems reasonably clear. More complex and interesting is how he conceives the basic elements of pitch combining to form musically meaningful wholes, and here we come back to the key terms *perde*, *aġāze*, *naġme*, *terkīb* and *maḳām*, which are presented (pp. 19-20) in an evidently hierarchical sequence.

However,

(1) The term *perde* is not really defined; rather, he simply reverts to his previous distinction between the different functional loads of main notes (*tamām perdeler*) versus secondary notes (*nim (= nā-tamām) perdeler*), the former viewed as unvarying in value, the latter as contextually determined.

(2) It is thus only with the second term, *aġāze*, that Cantemir begins to make the nature of the series clear, for from the implied notion of a single (even if not context-free) note, we move to that of an inchoate and unfocused melodic movement insufficiently specific to be assigned to a given mode.[64]

(3) With *naġme* we arrive at the next stage, that of a clearly profiled melody the modal identity of which, in the absence of a finalis (*ḳarār-ı istirāḥat*), can still not readily be determined.[65]

(4) The definition of *terkīb*, unfortunately, does not build on that of *naġme* but is essentially dependent on that of *maḳām*. It nevertheless fits in appropriately at this point in a series of increasingly goal-oriented structures, being defined in terms of a melody that may touch upon various makams but eventually settles on the finalis of one, being then regarded as a terkib of that makam and subordinate (*tābi'*) to it.[66]

On the basis of the above it might have been anticipated that *maḳām* would be described quite simply in terms of a clearly profiled melody the modal identity of which is clinched by its finalis. However, rather than provide a general definition of this type Cantemir launches directly into a discussion of the various categories of makam, and in most cases consideration of his definitions may usefully be delayed until particular instances are encountered. It is, nevertheless, worth noting here that the first and evidently most important category comes full circle by linking up with the initial distinction between main and secondary notes:

(5) A simple makam (*müfred maḳām,* here contrasted with *mürekkeb,* 'compound') is one which has the following features: it selects one of the eight main notes as characteristically prominent (*ḳuṭb-ı daire*), thereby showing, whether in descent or ascent, that it is the makam associated with that note, and distinguishing itself from other makams; it subordinates to itself those terkibs associated with its notes; and it confirms its identity through arrival at a particular finalis.[67]

Thus although recognition is accorded, as anticipated, to the crucial role of the finalis, what receives greater stress is the notion of prominence within a given pitch set as a determinant of modal identity. There is no mention of any particular melodic profile and the implication is, indeed, of the lack of any restriction beyond what is implied by the prominence of a given note. The point is again made that terkibs are subordinate to makams, but at this stage there is insufficient evidence to determine whether the relationship is based on objective criteria or is arbitrary.

1.3.4.1 *Systemic creativity*

Related to this hierarchy is a set of ideas which stresses the notion of creative potential, and thereby extends considerably the semantic field of the term *terkīb*. In Chapter 2 Cantemir adduces in favour of his initial claim that music is limitless a rather muddled analogy with the productive capacity of a small set of letters (*ḥurūf*, i.e. sounds or, in more recent parlance, phonemes) in relation to language. He begins by referring to the open-ended (*nā-maḥdūd*) nature of the terkibs, which is very specifically contrasted with the closed (*maḥdūd*) makams, thus obviously suggesting a contrast between open and closed sets of modes. The immediately ensuing linguistic analogy points, however, in a rather different direction, for the terkibs are next compared with the 24 letters (of the Arabic alphabet) which create the syllables (*hece*) which combine to form the words (*luġat*) of various languages, the implication being that the terkibs are not so much a set of entities separate from and contrasted with the makams but are in some way constitutive of them. But there is then an immediate change of tack, for the following statement equates with the 24 letters the set of 33 pitches that, we are now told, have the potential to generate a limitless number of terkibs, which would again accord with, although it certainly does not require, the interpretation of terkib as a particular form of mode.

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[61] Fonton provides a parallel discrepancy: his drawing of the tanbur has, alongside, the fret names, and these include e.g. both tiz beyati (*e♭'*) and tiz hisar (*d‡'*), but in the text he says that above *e 'il n'y a plus qu'un demi-ton entre les intervalles'* (Neubauer, op. cit., fig. 2 and p. 294/46).

[62] Accordingly, in the Introduction to Part i (p. xiv) it would have been more accurate to speak of 'various pitch designations' rather than of 'various pitch levels', while on p. xvi the comments on saba and uzzal may be regarded as anachronistic.

[63] A further instance of the same value is provided by the *c♯'* in piece 284, an inadvertent reflex of modern Turkish habits of notation. The original has *d♭'*, but the context is the tetrachord 1 2𝄳 3 4, which in the lower octave Cantemir always notates *A B𝄳 c‡ d*, and could have notated here *a b𝄳 c‡' d'*. The unorthodox choice of *d♭'* here may therefore be taken as a further pointer to there having been just a two semitone division of the *c' - d'* wholetone.

[64] اغازه اولدر كه كرك تمام كرك نيم پر[د]ه نك اوزرينده آوازى حركتسز طوتسك كرچه اول پرده نك صداسنى واغازه سنى ويرر ، لكن نه مقام اولدوغى بيان ايتمز .

[65] نغمه اولدر كه كرچه آوازك حركتى اولور لكن قرار استراحتى ايتمدن نه مقامده اولدوغى فصل ايتميوب كوش ايده نى شبهه ده طوتر . قرار استراحتى ايلديكده اول زمان فلان وفلان / مقامك نغمه سى دينلور .

[66] تركب اولدر كه آواز بر قچ پرده نك اوزرينده حركت ايدوب وبر قچ مقامك يرلرينه اوغرايوب كچر بعده اوغرادوغى مقاملرك بريسينك قراركاهنه واروب وانده قرار استراحتى ايليوب اول مقامك تراكبندن اولوب واول مقامه تابع اولدوغنه بيان ايدر .

[67] مفرد مقام اولدر كه سكز تمام پرده لرك اورته سنده اولان پردهٔ قطب دايرهٔ پرده ها ايدوب كرك تيزدن نرمه كرك نرمدن تيزه واريلسه قطب مزكور اول پرده نك مقامى اولدوغنه بالذات كوسترر ، وساير مقاملردن بلا شبه فصل وتفريق اولنور ، واول پرده لره منصوب اولان تركباتى كندويه تابع ايتديرر ، ومحصوص اولان قراركاهنه واردقدنصكره اجراى تتمهٔ مقام ايلديكنه بيان ايدر .

In fact, the further development of the argument allows for another interpretation. Here Cantemir presses two parallel claims: that just as speech is possible (and, by implication, infinitely variable) within the limits of a given language, so within the confines of each one of a limited set of makams drawn from the whole set of pitches several terkibs are combined within each composition; and that just as in a language there may exist neglected and obsolete words created from the 24 letters, so within the limited set of makams drawn from the 33 pitches an infinite number of terkibs can be created.[68] The reference in the second claim to obsolete (*nā-müsta'mel*) words seems gratuitous, but lurking here is an analogy with what Cantemir will later classify as obsolete terkibs. These are most definitely modes, but it is clear from the main thrust of this argument, as equally from the first, that Cantemir is now invoking a formal framework for the term terkib, that of a subsection within a composition, so that from an initial opposition which strongly suggested a conceptual discrimination or hierarchy between two classes of modes we have moved to a fundamental statement of the infinite creative possibilities available within the limited confines of a single mode. Using a slightly different terminology, Cantemir's language/music parallel in this latter formulation may be stated as:

finite:	set of phonemes	set of pitches
infinite:	utterance	terkib
finite:	(frame of individual) language	(frame of individual) makam

But to conclude this section Cantemir produces a similar set of equivalences of his own, and here a further musical term is introduced to fill a gap and complete the four-term homology by providing at last an equivalent to the intermediate level, between letters and words, of the syllable:

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[68] The text (pp. 16-17) reads:

ونه دكلو جمله ملّتلرك لسانلرى تحديد اولوب هركس كندو لسانى اوزره مكالمه ايدر ، او دكلو جمله پرده لرك مقاملرى محدود اولوب هر بر بسته ياخود پشرو / بر مقامك اوزرينده تصنيف اولوب بر قچ تراكبدن مركّب اولمشدر . ونه شكل يكرمى دورت خروفدن دخى نيچه نيچه حدّ وحساب يوق كه بر لسانه بكزميه مهمل ونا مستعمل لغتلر ايجاد اولنابلور ايدى ، اول شكل اوتوز اوچ پرده دن ومحدود اولان مقاملرك ايچنده بي نهايه تراكب تصنيف ومركّب اوله بلور ايدى .

letters	pitches
syllable	aġāze
word	terkib
language	makam[69]

The analogy is now exact, and the positioning of aġāze captures precisely its intermediate character as a constituent of a larger structure that is in itself incomplete.

But there is at the same time an apparent paradox. The word→language relationship, where combinatorial creativity resides ultimately in the latter (so that Cantemir's sequence is, on the language side, precisely cumulative), seems to be the opposite of the terkib→makam one, where it is at the level of terkib that unbounded creativity is stressed. The paradox may be resolved if we understand language to mean not the endless flux of utterance but, essentially, its underlying grammar. The analogy is thus with makam conceived of as a finite set of generative rules of infinite productive power;[70] and it is to a discussion of musical grammar and its creative potential as manifested specifically in the rich instrumental repertoire recorded by Cantemir that we may now turn.

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[69] p. 17:

ايمدى خروفه پرده لر ، هجه يه اغازه ، لغتده (sic) تركب ، لسانه مقام ، تشبه ايدوب كنج موسيقينك مختارينى اله آلق مقيّد اوله سن .

[70] As with so much else in the *edvār*, the origins of this fascinating speculation on the parallels between music and language are not readily apparent. There is no obvious antecedent in the surviving Ottoman musical treatises, which do not seem to touch upon the music/language relationship at all. On the European side one can point already in the *Musica Enchiriadis* to an equation of letters and sounds, and to syntactic analogies between language and music (see H.S. Powers, 'Language models and musical analysis', *Ethnomusicology*, 24/1,1980, 1-60), but Cantemir cannot have been aware of such mediæval sources. He may, on the other hand, have been aware of Renaissance humanist views on the importance of the appropriate setting of words, but these envisaged a union of verse and song expressly designed to recreate the ethical powers of music as understood from classical authorities, and this could hardly have suggested to him such a dynamic concept of music and language as equivalent creative systems. Equally distant is the Baroque development of ideas on the relationship between rhetoric and music (*Affektenlehre*). On the Islamic side there is also a commonplace emphasis on the notion of appropriateness in matching words and music, but apart from a general comparison drawn by al-Fārābī between music and language as being both rule-governed systems (*kitāb al-mūsīqī al-kabīr*, p. 488, a source that in any case may not have been known to Cantemir) there is nothing in the theoretical literature that further develops the analogy between the two, and certainly not in the way Cantemir does.

Mode

2.1 *Approaches*

Various strategies may be thought appropriate in examining such a large body of material. It would be both logical and intuitively attractive, for example, to adhere at least initially to Cantemir's own categorizations and definitions on the assumption that, even if not all of equal standing, they serve to demarcate various areas of the repertoire that would repay separate scrutiny. But an equally good case could be made for deliberately setting them aside and subjecting the unsorted mass of notations to a particular pre-selected technique of analysis, one therefore potentially capable, if not of cultural neutrality, then at least of consistency of application. A third possibility would be a form of compromise balancing a possible loss of rigour against a possible gain in sensitivity by attempting some measure of synthesis, or at least productive interweaving, of emic and etic approaches. Again, might it be more illuminating to consider modes in groups, or individually? And in either case where would it be most useful to start—with the modes deemed by Cantemir to be the most significant, normally those which provide the greatest number of examples (no fewer that 49 compositions in the case of hüseyni), or with those of evidently lesser significance where the amount of material to consider is small, in some cases, indeed, consisting of no more than a single brief representation in a modulatory sequence?

The approach adopted here is, in general, to attempt to outline the main characteristics of each mode separately, beginning with those offering the smallest amount of material, and subjecting the section(s) or piece(s) in which it occurs to a single simple process of analysis. However, scrutiny of the corpus will not proceed in a wholly automatic sequence, for the order will be inflected in order to take into account a number of obvious derivational relationships, so that some modes will be considered in pairs or small groups. These will normally be similar to, or identical with, the groupings established by Cantemir. His larger-scale categories, however, are based in part on criteria not always relevant to the form of analysis being undertaken here, and in the present section they will be ignored. On the other hand, the descriptive material provided in the *edvār* for a great many individual modes must be regarded both as a valuable control and as representing a particularly significant emic perception of structure, one, indeed, that may on occasion foreground features barely discernible in the notations or liable to be differently interpreted. It must be deemed, therefore, a vital adjunct to any analysis and will always be taken into consideration.

In the first stage analysis will not usually be taken beyond the level of the individual mode. Consideration of such matters as modulatory practice and structural relationships between modes, whether in closely related small groups or on a broader scale, will be deferred to a later section. Less easy to disentangle are aspects of rhythm and form that impinge upon modal articulation, but as far as possible such features will also be dealt with separately, as will aspects of compositional strategy that are not mode-specific, such as cadences. Separate consideration will also be given to the appropriateness of the concept of system in relation to the range of modal structures recorded by Cantemir, and to an evaluation of the adequacy of Cantemir's own categorizations.

As noted, discussion will begin with those modes presenting the fewest readily identifiable examples. This approach suffers from the obvious logical disadvantage that in the initial stages generalization about individual modes is either impossible or extremely difficult. But at the same time it has the practical advantage of allowing certain analytical issues that arise to be introduced in a more gradual fashion than would be possible if the attempt were made to digest all at once the vast amount of material presented by one of the more populous modes. For these, an initial assumption will be that the corpus for each is homogeneous in the sense that whatever traits might, at least hypothetically, characterize the output of a particular composer, and whatever stylistic differences might eventually be discerned between earlier and later works, all the pieces in that mode will conform to certain general norms of pitch organization and melodic articulation which will constitute its late seventeenth-century grammar. In those cases where the assumption breaks down, questions of historical development and categorization arise, but these will be addressed in a later section. Cantemir's own descriptions will not be allowed to influence procedure in the first stage of analysis but, as the discussion of the first mode will already make clear, they may raise fundamental questions about what further stages of abstraction are appropriate.

As a preliminary step, however, we may refer briefly to Cantemir's segmentation of the mode stock. The intention here is not to evaluate the various criteria adduced as potential analytical tools but simply, given that the membership of each category is specified, to use this material as a check on the range of mode names supplied by the notations, hoping thereby to arrive at a closer approximation to the total number in use. From the headings for each piece we may form an initial view of the extreme variations in importance, that is, in frequency of occurrence, between modes: thus of the total of 345 compositions over half are accounted for by a mere six modes, and 298 by the most common 20, leaving the remaining 49 pieces to be divided between no fewer than 27 others, some of which were evidently marginal. Nevertheless, we cannot conclude from this that the combined figure of 47 modes represents the total number of modal differentiations recognized by Cantemir and his contemporaries, for although apparently the simplest of questions, that of the number of modes appearing in Cantemir's corpus cannot be answered with any certitude. While the notations virtually always indicate in the heading, as a matter of basic identification, the principal mode of a piece, they virtually never identify the others which may and frequently

do occur in modulatory passages, and these could well include further marginal entities. In this connexion it is instructive to note that in the two pieces characterized by systematic modulation for which all or some of the modulations are identified we encounter no fewer than 13 mode names which do not appear elsewhere in the notations, i.e. they do not occur as the principal mode of a composition, and the assumption must therefore be that further such names would probably have been invoked if all modulatory passages in the corpus were identified; further confirmation of the possibility that other modes might lurk undetected is provided by the fact that the *edvār* does indeed refer to a number of modes not found among the 60 cited in the notations.[1]

The main catalogue of names in the *edvār* occurs on pp. 22-3, where Cantemir presents eight categories of mode with a list of those belonging to each. For present purposes reference need only be made to those containing names not cited in the notations, and we may therefore pass over the first seven, all the modes of which appear in them, even if one, dügâh, only occurs once and is, indeed, characterized in the *edvār* as extremely rare.[2] But the eighth category, which consists of modes that for Cantemir should properly be termed terkib but are mistakenly called makam, and with a total of 20 is by far the largest, contains two names that do not appear in the notations.[3] At this point in the *edvār* no further categories are defined, but the ensuing list of individual mode descriptions goes on (pp. 54-5) to mention a set of six which are defined as not being used as the main mode of a composition, and again four of these fail to be cited in the notations. But this does not exhaust the total of mode names in the *edvār*, for a feature of the descriptions of the principal modes is to append a list, where appropriate, of others (termed *etbā'*, plural of *tābi'*) which stand in a proximate modulatory relationship to them, and these lists supply no fewer than 25 further names not found in the notations, thus making a total of at least 30 to be added to the 60 there attested. Such satellite modes are usually sorted under two heads, respectively (and rather oddly) called 'used' (*müsta'mel*) and 'unused' (*ġayr müsta'mel*), and the former term is also appended to the set of six which, accordingly, might be thought of as representative rather than exclusive, thus suggesting the possible presence of yet other unnamed modes in the modulation sections of the notations. Nor, in this connexion, can those assigned to an 'unused' satellite group be simply disregarded, for some of them reappear in relation to another principal mode in the 'used' category (and also, as proof of their real rather than notional existence, in the notations). It would in any case be illogical for Cantemir to refer to non-existent possibilities and it may be assumed that the two categories contrast, rather, more and less likely options, the latter also, perhaps, including some modes that were obsolescent, for one or two are explicitly designated by Cantemir as ancient. The problem of isolating the passages which might constitute the unacknowledged appearance of otherwise unknown modes and, if at all possible, of identifying which ones, will be deferred: the point here, rather, is to recognize the obvious, that it confronts the analytical enterprise with a particular difficulty because of the potential circularity involved. Defining what does not form part of a given mode is sometimes easy, but elsewhere it may depend on the results of an analysis that in turn depends on a prior definition of the material that does form part of the mode. As a precaution against potential adulteration, and to avoid a complex process of detection based on inadequate information, attention will be confined initially to the material presented in the first hane (H1) and the mülâzime (M), neither of which, with very rare and readily definable exceptions, strays from the main mode of the piece, indeed whose very purpose, it may be assumed, is to present its main features. The relationship to this material of what is contained in the remaining sections will be dealt with on a case by case basis.

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[1] A lack of congruence that also applies in reverse: the notations contain mode names not found in the *edvār*.

[2] Or non-existent. See the discussion of 54. dügâh below. (Each mode is numbered, and for ease of reference the number will be cited on the first appearance of a mode in each section.)

[3] Although only 19 names are listed.

Invocation of the terms analysis and grammar might suggest an undertaking far more ambitious than what is attempted here. With a living tradition it would certainly be tempting, however daunting, to think of a devising a form of analysis that might yield not merely a convincing descriptive account of the surface phenomena but also the elements of a grammar, that is, by analogy with language, a statement of the processes giving rise to those phenomena, formulated as generative rules. In the present context, however, the absence of practitioners who could determine what is and is not well-formed makes it impossible to test the validity of any such rules; and in any case, even if it might be theoretically possible to devise a set producing all and only the material contained in the corpus, in practice its sheer size places such a goal far beyond reach.

The purposes of the following modal analysis are decidedly more modest. It attempts no more than to describe those structural elements common to the various individual manifestations of a given mode. It will always refer to, and be guided by, Cantemir's own descriptions, but is nevertheless primarily characterized by the mechanical application of a few simple processes designed to clarify pitch relationships and hierarchies while at the same time providing a conspectus of the material in question. This will consist of those pieces (or sections) to which the mode name is attached minus whatever is identifiable as a modulation into other modes, with in addition occasional reference to sections of other pieces identifiable as modulations into the mode in question. There will be no attempt at this first stage to filter the material further in order to arrive at a putative higher level abstraction, although some form of symbolic shorthand will eventually need to be employed as a tool to facilitate comparisons between modes. Rather, representation will consist largely of a straightforward synoptic display in the manner of Ruwet[4] or Nattiez[5] designed to identify identical or closely similar material.[6] It does not, however, simply cut up and realign the existing notation—apart from anything else problems of space preclude the possibility of engaging in such an enterprise for the corpus as a whole: it presents it at the same time in the form of an elementary reduction characterized by drastic simplification of the representation of rhythmic

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[4] N. Ruwet, *Langage, musique, poésie*, Paris: Le Seuil, 1972.

[5] J.J. Nattiez, *Fondements d'une sémiologie de la musique*, Paris: Union Générale d'Éditions, 1975, but see particularly the cautionary remarks on methodology, pp. 253-7.

[6] A similar approach has been developed further in relation to a body of material in some ways comparable to that studied here in D.R. Widdess, *The rāgas of early Indian music*, Oxford: Clarendon Press, 1995, but although inspiration has been taken from this model, the size of the present corpus rules out any attempt to emulate its analytical detail and refinement.

organization and differences in duration combined with retention of all the information encoded in the original notation with regard to pitch and form. Inevitably, problems sometimes arise with regard to the criteria according to which a particular segmentation is made, and to the extent that material could sometimes be assigned with equal justification to more than one position a degree of arbitrariness is involved. It is not, however, endemic, and particular difficulties are discussed as they occur.

2.1.1 *Conventions*

Initially the following conventions have been adopted:

1. As far as relative duration is concerned only a binary long/short distinction has been maintained. Long pitches (indicated by void note-heads) are those (ignoring any sub-division by separate attacks) of two time units duration and above.
2. A further binary distinction relates to prominence (indicated by upward stems) as determined by position within the rhythmic cycle: the articulation of the melody frequently reflects the pattern marked by the distribution of *düm tek* percussions that each cycle exhibits, so that certain nodes may be deemed prominent.
3. A tie is also a sign of prominence in the sense that the area it covers may be regarded as an elaboration of a single pitch (so that at a further stage of abstraction all the other pitches included would be deletable).[7] The potential domain of such elaboration is limited to a fourth either side of the pitch in question.
4. Downward stems and beams always indicate repetition. Groups of two or more pitches that are immediately repeated with the same or virtually the same rhythmic configuration are given only once, and downward stems joined by a single beam link the two notes (or, if more than two, the first and last). If repeated more than once, the number of repetitions will be indicated. Any indication of prominence given should be assumed to apply within only one occurrence of the material.
5. With discontinuous repetition and sequences (whether continuous or discontinuous) having the same or virtually the same rhythmic configuration the downward stems are joined by a double beam. If only two pitches are involved they are joined by downward stems and a double beam on their first occurrence and thereafter a downward stem with an incipient double beam is attached to the first note and the second is omitted; if there are more than two pitches then the repetition may be indicated by similarly marking only the first note, the last note (with the incipient double beam pointing left) or, depending on what would be most informative in context, the first and last.

Example 1 provides a sample of the form of display that can result, applying the above conventions to 29 Ma **1-9**. Of these conventions 4 and 5 are no more that graphic abbreviations, and allow the complete pitch contour to be reconstituted. The others, it may be argued,

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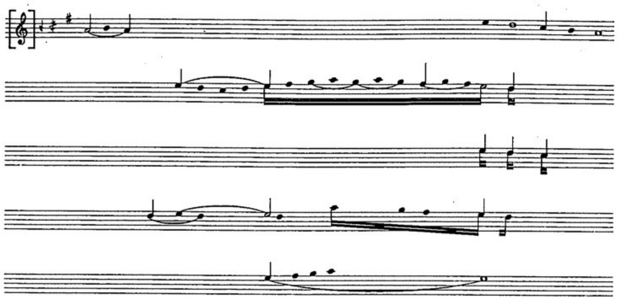
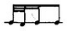
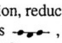
[7] An alternative term that suggests itself is prolongation, but this will be avoided so as not to arouse Schenkerian expectations (or hackles).



Example 1

are essentially extrapolations of features already adumbrated in the notations themselves, and cannot therefore be dismissed as arbitrary impositions the assumed objectivity of which is suspect. Relevant to convention 3 are the differences between the two versions where the same piece is notated twice. Thus a comparison of 338 and 343 shows, to take a basic example, that the presence in one of  where the other has is on one level an indication of permissible alternatives, while on another it yields the conclusion that 343 embodies a more abstract representation, reducing the more complex variant, which according to convention 3 would be written as , to what is perceived to be an underlying . Such contrasts could be multiplied if account were taken of the graphic variants between Cantemir and 'Alī Ufḳi.[8] With regard to convention 2, it has already been noted that the mapping of melody onto rhythmic cycle is one of the most distinctive features of this corpus.[9] It is true that in some cycles (e.g. berefşan) this is much more regular that in others (e.g. darb-ı fetih), but in most cases there is a marked congruence between the two, so that to include a reference to positional prominence is to do no more that include in the melodic abstract a small part of the information that would be conveyed if the representation of the rhythmic underlay had been retained along with precise notation of duration. As for convention 1, the choice of a minimum of two time units as the lower limit of the long category may be defended against the charge of arbitrariness on the grounds that, far more frequently than with lesser durations, the onset of pitches sustained for two or more time units tends to appear in marked positions, either melodically (at a cadence), or rhythmically, at a prominent node in the cycle.

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[8] See in Part i the notes to e.g. 29, 30 or 34.

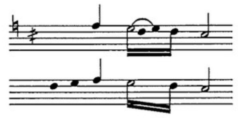
[9] For further discussion see 3.

2.2.1 *Modes 1*

Given the wide variations in incidence of the modes that appear in the notations, with the most common ten accounting for two thirds of the whole collection, it is clear that the first group to be considered, those that are mentioned only once, is likely to be extremely large. But if we defer discussion of all those where the name points to a combined or derived form, or where there is a relationship with another mode so close that discrimination requires immediate juxtaposition and comparison, the actual total of 22 can be reduced to eight.[10] Of these, four (hüzzam, karcığar, rahat ül-ervah, zirgüle) are named only in relation to a brief section within 296, a large-scale piece made up of an extensive series of modulations, and a further two (aşiran, safayan) similarly appear in 22, another such piece, so that in only two cases (salmak, sipihr) are we confronted with the main mode of a composition. Before turning to these, however, it would be appropriate, given the still minute amount of material available, to consider a further two modes (kuçek, şiraz) that do not constitute the main mode of a piece but are cited more than once. As has already been conceded, for all these modes, considered individually, generalization is difficult if not impossible. But remarks of wider applicability may certainly be essayed on the basis of certain features they exhibit, especially when considered in conjunction with Cantemir's verbal statements.

1. hüzzam

The rhythmic cycle here, as with all the other examples in this first group, is fahte. This has 10 time units, and throughout 296 the melodic contour strongly suggests that in addition to time unit 1 (which will be considered prominent in all cycles) the one other obviously prominent time unit is 7 (i.e. the main internal division of the cycle is 6 + 4). The distribution of the *düm tek* percussions would seem to run counter to this, but the final sequence of strokes, *düm tek 0 teke teke*, is a concluding formula found in several cycles, and except in relation to one particular cadence pattern normally corresponds to melodic prominence being given to the preantepenultimate time unit (frequently in the form of the onset of the pitch that will be sustained to the end of the cycle). We have, accordingly:



Example 2

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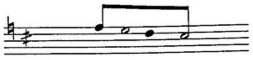
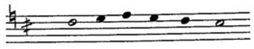
[10] The combined or derived forms so excluded are: acem-buselik, acem yegâhi, hüseyni-buselik, ısfahan-ırak, muhalif ırak, necit hüseyni, şiraz ve sünbüle, sultani ırak, uşşak aşirani, zirgüle-şehnaz. A further such mode is huzi aşiran, for which there is, however, no example of huzi to which it can be related. Deferral is, nevertheless, still justified, for the piece in which it occurs is assigned by 'Alī Ufḳi to buselik aşirani. Deferral on grounds of similarity applies to zengüle (which will be considered in conjunction with uzzal) and to şuri and dügâh (which will be considered in conjunction with hüseyni).

The upward scale between the two segments is a common linking device (that will, in more extended form, most frequently effect a transition from a low cadence note to a high-register passage). Whether or not best viewed as an aspect of form, nothing elsewhere suggests that it might be a feature intrinsic to the structure of any given mode. Appeal to the evidence of the corpus as a whole also indicates that repetition, although a very common feature, is unlikely to be a necessary one, so that on the evidence of the notation alone hüzzam would appear to be based on a simple descending line:



Example 3

However, a slightly different picture emerges from the *edvār*, where hüzzam is referred to on four separate occasions. Two (pp. 22, 40) are simply citations, the first placing it among the terkibs, the second among those forming the modulatory family of 31. uzzal, which shares with it the pitches *e d c♯*. On p. 27 *c♯* is confirmed as the finalis (while on p. 52 the comment is made that it is the only terkib to have a secondary note as finalis). This latter remark follows a general description of hüzzam, which is stated to begin like 30. hicaz, and the following outline is specified:[11]



Example 4

(Here, as in other conversions to notated form of Cantemir's verbal statements, pitches specified as initial and finalis are indicated by void note-heads.)

In other words, what had previously been identified by analogy as a non mode-specific link passage, to be omitted from any higher-level abstraction, is here defined not merely as an integral element, but specifically the one with which hüzzam begins. This does not mean that

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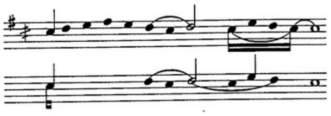
[11] The complete passage is as follows:

حزام ترکبی صرف حجاز کبی حرکت اغازه سنی شروع ایدر، یعنی نوا پرده سندن حرکت ایدوب حسینی پرده سنه چقار اندن عجم پرده سنه باصوب کنه حسینی پرده سنه کلور اندن نوایه اینوب نوادن عزّال پرده سنده قرار قلر، اکاه اولکی جمله تراکبدن نیم پرده ده قرار قله بو ترکبدن غیری یوقدر.

It might be thought that use of the verb *basmak* ('to press, tread, settle') in relation to *f* could suggest a degree of emphasis, but elsewhere this verb is associated with the secondary note arrived at after passing over (*aşmak*) a main note (and it also collocates with *oḫşaya* 'stroking, patting'). It seems, therefore, to be neutral with regard to prominence. The passage is translated in Feldman, op. cit., p. 246 (where there is also a transcription), but omitting the reference to *f* (hence, perhaps, the following remark that it is restricted to a minor third).

but it is still a salutary warning to be shown by the very first mode that apparently obvious and well-grounded conclusions may still turn out to be wrong.

When listed as a terkib of uzzal, hüzzam is placed within the 'unused' category, so that it is hardly surprising that it cannot readily be identified with a modulatory passage in any of the notated pieces in uzzal. There is, however, one possible exception: 333, where H3 not only has the secondary note *c♯* as finalis, a feature, as we have seen, that according to Cantemir is unique to hüzzam, but also a melodic outline that conforms closely to his prescriptions. The only worrying point of difference is that the initial ascent is to *f♯* rather than *f*, but if this assumed to be a permissible variant we may compare with ex. 2 the parallel reduction of this passage:[12]



Example 5

Taken together, therefore, the two suggest that hüzzam is restricted to the pitch set *c♯ d e f* (or *f♯*); that the initial ascent stipulated by Cantemir may begin from *c♯* rather than *d*, or may be delayed so that it only appears before the restatement of the descending line; and that elaboration is concentrated on *e*, *d* (with both of which it is effected by alternation with the note below) and *c♯*.[13]

2. *karcığar*

The amount of material here is slightly greater, since instead of the normal two cycles for each modulation in 296 three are allotted to karcığar. In the pitch set used it clearly resembles 26. beyati, which immediately precedes it in the chain of modulations. The question thus arises, and will return in other cases also, of the degree to which, with possible aesthetic implications of disguise, surprise and discovery, the positive identification of karcığar is delayed. More prosaically, to the extent that the onset of the karcığar section repeats material already presented in beyati, should that area be regarded as overlapping, and therefore part of karcığar, or an extension of beyati, and therefore not? Beginning with the former option (and indicating, exceptionally, the cycle divisions) we obtain:

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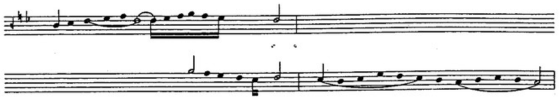
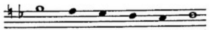
[12] The cycle here is çenber, the internal pattern of prominence in which is discussed below under 21. sünbüle.

[13] Other instances of this presumed variant with *f♯* are 130 H2a which, by comparison, has extensive elaboration of the initial *d* but a much less elaborated descent from *f♯* to *c♯*, and (at least the first two cycles of) 305 H2a. See also the discussion of modulation in 40. ırak.



Example 6

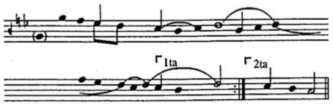
However, this differs markedly from the outline defined by Cantemir for this terkib (p. 55), which omits the initial ascent and is largely coincident with cycle 2:



Example 7

On the basis of this account, therefore, the second option would seem preferable, with the initial ascent in cycle 1 being allotted rather to beyati. But matters are complicated somewhat by the fact that Cantemir's account also fails to include anything corresponding to cycle 3, which cannot be dismissed as a transitional or overlapping passage since the following mode, 51. muhayyer, starts in the upper register (with *f*♯).

There is no mention of karcığar in the various modulatory families, and it does not occur as a modulation in the compositions in beyati, with the possible exception of 331/351, by Cantemir himself, in which the beginning of Ma (ignoring the initial extension of the preceding cadential *A*) is a descent from *g*, the first cycle matching perfectly Cantemir's description, while the beginning of the second is a replica of the beginning of the example in 296. In the repeat the cadence moves from *d* to *A* in parallel with cycles 2 and 3 of 296:[14]



Example 8

However, since it would be very unusual for the beginning of M to be in anything other than the main mode, it would be safer to regard this passage as a cunning allusion exploiting the

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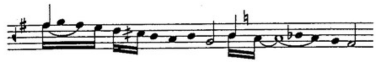
[14] The cycle here is again çenber.

area of overlap between the two modes[15] rather than an outright modulation.

3. rahat ül-ervah

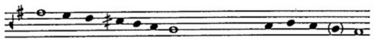
The brief exposition in 296, which reverts to the normal length of two cycles, again consists of a descending line in two segments, the second, however, being not a repeat but a truncated sequence beginning a fifth lower. There is also a high incidence of internal sequential repetition involving elaboration by adding the pitch above:



Example 9

Without Cantemir's verbal account it would be difficult to define the modal characteristics of this terkib. The beginning follows on smoothly from 44. eviç, which immediately precedes it, and the opening down to *c*♯ is interpretable as a varied restatement of a similar descent in eviç which touches *c*♯ before ascending again to *f*♯, so that questions of overlap and the correct assignment of material again emerge. It may be only with the prominence accorded *G* that rahat ül-ervah is firmly established, even though it is probable that the modulation away from eviç is indicated immediately after *c*♯ by the continuation of the descent in contrast to the preceding ascent. The segment following *G*, on the other hand, is hardly to be distinguished from 40. ırak. The two share the same finalis, and the particular shape of the cadence figure from the long *A* down to *F*♯ is commonly found in ırak also, appearing, indeed, in the example provided by 296, where it precedes eviç. It is thus hardly surprising to find that rahat ül-ervah is listed among the modulatory families of both eviç and ırak, rather more so that it then fails to appear as a modulation not only in any of the eviç pieces notated by Cantemir[16] but also among the much larger group of pieces in ırak, with one possible exception in relation to which it is appropriate to consult Cantemir's account.

The main description of rahat ül-ervah (pp. 53-4) yields the following outline (in which a void note-head is also used to indicate a medially prominent or cadence note):[17]



Example 10

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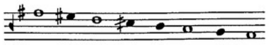
[15] The resemblance between the two modes is emphasized by Cantemir himself in the *edvār* (p. 37) when describing beyati.

[16] One, 328, does feature a descending passage starting with *f*♯ and passing through *c*♯ rather than *c*, but as this cadences on *A* it should rather be defined as a modulation into hicaz.

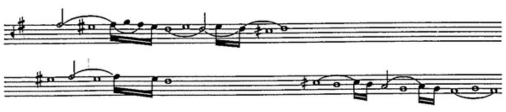
[17] The durational prominence of *G* is indicated by the wording راست پرده سنده براز مکس اولنوب . The conclusion suggests omission of the bracketed *G*: دوکاهه عودت ایدوب بردن عراق پرده سنه کلوب قرار قلر .

This is virtually identical with ex. 9. But a slightly different version is implied by the reference (p. 33) to rahat ül-ervah in the course of the discussion of eviç, where Cantemir states that the substitution of *f* (= *e*♯) for *e* and *c*♯ for *c*, with hicaz-like melodic movement and finalis *F*♯, produces 'delightful, sweet rahat ül-ervah' (*leẕīẕ ve-pür ḥalāvet rāḥat ül-ervāḥ*). Marking as prominent *A* and *d*, the notes framing what may be termed the hicaz tetrachord, we would thus have on the basis of this description something like:



Example 11

and it is to this version that the modulation in 7 H3 can readily be related:[18]



Example 12

The use here of the augmented second which results from the raising of *e* to *e*♯ suggests a fairly recent adjustment in parallel to the raising of *A* to *A*♯ that can be found in the later pieces in 45. segâh as well as in 15. geveşt. It may be noted, however, that despite Cantemir's evident liking for rahat ül-ervah, it does not feature among the modulatory passages in his own compositions.

4. zirgüle

In this case Cantemir gives no description; indeed, he fails to mention such a mode at all. Etymologically zirgüle is related to (32.) zengüle, which he does describe, and is similarly identified with the note *G*♯, to which, indeed, he attaches both forms (zirgüle on p. 1 of the *edvār*, zengüle on p. 41). But while *G*♯ appears prominently in the exemplification of zirgüle, the pitch set it employs fails to match that occurring in the one composition the collection contains in zengüle, 302 (by Cantemir himself).[19] There is an initial resemblance in the alternation of *A* and *G*♯, followed by *B*𝄳, but thereafter the notes *c*♯, *d* and *e* appear, so that the two cannot readily be regarded as the same mode paraded under two slightly different labels: rather, zirgüle is a (possibly related) but more restricted entity of lesser potential.

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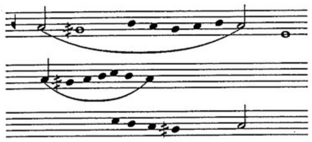
[18] The cycle here is darb-ı fetih, the internal pattern of prominence in which is discussed below under 18. hisar.

[19] Which, ironically, he then identifies in the index (p. 115) as being in zirgüle.

There are again two cycles of material, which may be represented as follows:

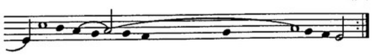


Example 13

The predominance of *A* here is overwhelming: it is both initial and finalis, occupies all prominent nodes and no less than 50% of the total duration. However, the name indicates that the (leading note) role of *G*♯ was important to the identity of this mode, so that the temptation to reduce zirgüle to no more than an elaboration of *A* restricted to the pitch set *G*♯ *A* *B*𝄳 *c* (with *E* providing a bourdon effect) should be resisted. The role of *E* is not clear: if not a bourdon filler it could be regarded as defining the lower tetrachord, thus implying an omitted *F*♯ and providing some measure of rapprochement with zengüle. However, possibly relevant here is the absence of any equivalent lower note in 328 H3b, which could reasonably be considered a transposition of zirgüle up a fifth.[20]

5. aşiran

This, the first of the two modes which appear not in 296 but in 22, another grand modulatory tour, is, like zirgüle, the name of a note, and also resembles it in failing to be described, or even mentioned, by Cantemir as a mode, so that it is absent from all the lists of modulatory families. The rhythmic cycle of 22 is again fahte and, not for the first time, the amount of material involved needs to be defined. The name aşiran is given to H2c, while the next name to be mentioned is şiraz, which is attached to H2e. In theory, therefore, H2d could either be a further part of aşiran or the exemplification of another, unidentified mode; but there is a strong resemblance between H2c and d, and it seems incontestible that the latter is also part of the exposition of aşiran, which can consequently be represented as:



Example 14

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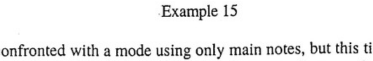
[20] On the other hand, for an interesting parallel in which the lower tetrachord is filled in, one might cite 332 H3a, although given the presence here of *B* in place of *B*𝄳 this passage cannot be identified with zirgüle.

The note designated by the name aşiran is the finalis, *E*. What appears to set the mode aşiran apart, by comparison with all the others using only main notes, is its restricted range and the identity of its finalis, or, more simply, its low tessitura. All the other modes with *E* as finalis are considered, as their names make clear, secondary forms which add a lower tetrachord (or pentachord) to a mode with finalis *A* (or *B*). According to this conceptualization, no other non-derived mode has *E* as its finalis, and aşiran must be regarded essentially as an independent form of modal articulation of the *E*-*A* tetrachord unattached to any other pre-existing mode and (hence) confined to the lower register.

6. safayan

This, the second mode to appear only in 22, is similarly passed over in silence by Cantemir. As the name also fails to receive any mention in the other theoretical texts that may be assumed to be proximate in time to the *edvār*, textual corruption might be suspected, but the orthography is very clear, and the only remotely similar mode name, ısfahan,[21] would be inappropriate for the melodic material displayed here, which may be represented as:



Example 15

Again, we are confronted with a mode using only main notes, but this time wholly confined within a single tetrachord and one, moreover, that does not lie towards an extremity of the gamut but occupies its busiest area, so that similar material might be expected to occur in such common modes as 26. beyati, 35. acem, 55. uşşak and 57. neva. Accordingly, it seems odd that such material should have been identified as a separate modal entity, less so that this should be the only occasion on which the name appears.[22]

There remain to be considered here the other two modes which do not occur as the main mode of a piece, but which are cited more than once. Both, şiraz and kuçek, occur in each of the külliyat pieces, 22 and 296, while kuçek is additionally identified as the mode of the final subsection of 130 H3.

7. şiraz

In contrast to safayan the existence of şiraz is recognised in the *edvār*, even if Cantemir provides no description of his own. He first mentions it (p. 32) as an 'unused' terkib within the modulatory family of 58. hüseyni, from which one might conclude that it would have *A* as finalis, but in the event it is *a* which is the finalis in 22 H2e and *e* (the most prominent note

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[21] Safayan is written صفايان and ısfahan اصفهان . The waters are muddied somewhat by the occurrence elsewhere of ṣafāhān as an alternative form of ısfahan, but not sufficiently to warrant identifying safayan with it.

[22] But although unidentified, virtually identical material occurs in 23 H3a.

in hüseyni) in 296. That the relationship between şiraz and hüseyni was close is suggested by the fact that in both 22 and 296 it constitutes the first modulation after the initial exposition of hüseyni,[23] and in the latter, indeed, the first cycle of the şiraz section and time units 1-2 of the second are an exact repeat of part of the hüseyni material. The question again arises, therefore, of whether this passage could only be in hüseyni or whether it inhabits a zone of overlap between the two, although in the latter case a positive identification of şiraz still cannot be made prior to the remaining passage of less than a single cycle in length. Reference to the comparable example in 22 confuses rather than clarifies, since it resembles neither part. It has nothing in common with the first cycle of 296 and does not, indeed, contain the note on which it cadences, which suggests that şiraz is to be identified rather with what follows. At the same time the brief injection in 296 of a pitch set including *B* and *c*♯, which would, accordingly, seem to be typical of şiraz, is wholly absent from the version in 22. This, if anything, could be related to the initial rising scale of time units 1-2 in the second cycle of 296—which still forms part of the overlapping area. If we are not to concede the possibility of there having been two unrelated competitors for the same name, the only way to reconcile them is to assume, however lamely, a bipartite structure consisting of an initial ascent (22 and 296) followed by a modulating descent and final ascent to *e* (296 only). However, Cantemir does provide confirmation that this conclusion is broadly correct, in the form of a description (p. 76) of şiraz embedded in material taken from earlier sources. Such earlier accounts do not always tally with the state of affairs in Cantemir's day, but in this case the correspondence is too close to be questioned, for şiraz is described as rising from *e* to *a*, descending to *c* and then rising through *c*♯ to finalis *e*.[24]

The general *a* → *e* trajectory is also exhibited in 22 H2h, which is labelled şiraz ve sünbüle, but neither it nor the following, unlabelled, sections bear any close resemblance to 21. sünbüle, especially as exemplified in H3h. In H2h itself one might point to the initial alternation of *a* and the note above (although in sünbüle one would expect this to be *b*♭ rather than *b*𝄳), followed by a descent, but as evidence this is vague in the extreme, suggesting at most the conclusion that sünbüle ve şiraz might be a more accurate designation. In any event, there is again no indication that şiraz could descend below *e*, so that the three versions, displayed in ex. 16, form a disparate and only tenuously related group within which the various overlapping fragments that are discernible would, in the absence of a common label, have failed to provide sufficient cohesion to justify the presumption of identity, especially when it is recalled that the crucial identificatory passage in 296 consists of material largely absent from 22.

8. kuçek

In this case Cantemir both recognizes the existence of kuçek among the terkibs and provides a brief description of his own (p. 55). According to this it has *g* as initial and descends through

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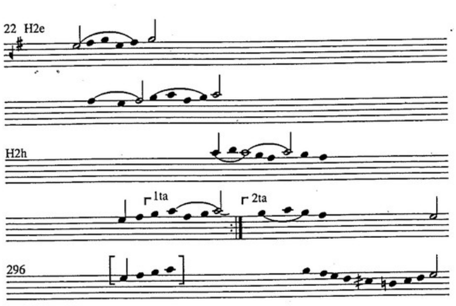
[23] Although not identified as şiraz, Ma is in fact exactly the same as H2e, which is.

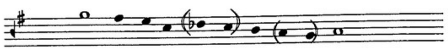
[24] The text (translated in Feldman, op. cit., p. 274) reads:

شيراز حسينى پرده سندن حركت ايدوب مخيره دك چيقار آندن عودت ايدوب تمام پرده لرايله چاركاهه دك اينر وكنه چاركاهدن عزال
پرده سيله چيقوب حسينى پرده سنده قرار قيلر.



Example 16

f♯ and *e* to *c*, omitting *d*. From *c* it proceeds like 25. saba to the finalis, *A*.[25] A final remark stresses that the omission of *d* is characteristic.[26] The only problem with this account is to know exactly what is implied by the reference to saba. This, too, frequently exhibits the *e* - *c* jump, which is sometimes followed by *c* *d*♭ *c* *B*𝄳*A*, both medially and finally, but just as frequent as a cadence is an elaboration of *A* containing *c* *B*𝄳 and (optionally) penultimate *G*. Taking account of these variations, one might conclude that Cantemir's definition corresponds to a basic outline of the following order:



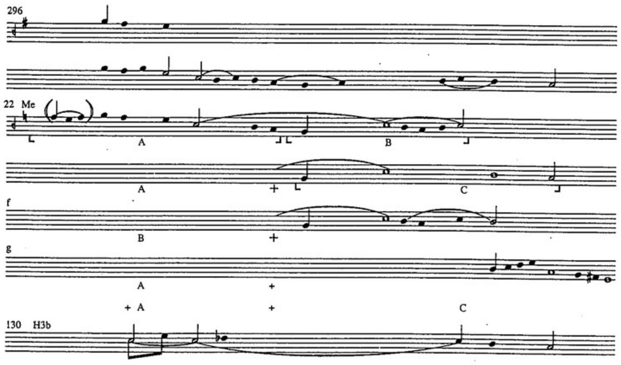
Example 17

The other references to kuçek in the *edvār* occur on p. 27, where it is defined as an 'unused' terkib with finalis *A*, and on p. 32, where it is cited as a member of the modulatory family of 58. hüseyni, again being classed as an 'unused' terkib (justifiably so, it seems, for apart from one or two possible brief allusions it is, as exemplified below, conspicuously absent from the large corpus of hüseyni pieces recorded by Cantemir).

The sample of kuçek in 296 is straightforward and requires no introduction, but that in 22 is more extended and rather more complex. Named as kuçek is Me, but the similarity between this and the following two subsections, to which no other name is given, is so great that they too must be assigned to it, thus yielding a total, without repeats, of 10 cycles. However, the beginning of Me 1 (which reappears three times) echoes the beginning of Md, in 35. acem, of which it emphasizes the prominent initial *f*. It seems reasonable to conclude that here the beginning of kuçek is a deliberately punning disguise (and one felt worth repeating), and that only when its identity is established by the crucial *e* - *c* interval can the preceding phrase be reinterpreted so that the first three notes are perceived as a continuation of acem and *g* is identified as the initial of kuçek (in ex. 18 these first three notes will be bracketed). However, following *g* is again *f* and not *f*♯ as in 296 and as described by Cantemir: such variation was, it seems, tolerable as long as the overall melodic contour, with its characteristic gapped scale, was adhered to, and in this respect both versions are comparable.

The same gap appears in 130 H3, but this time beginning from *c*, and there is nothing above *e*. Also striking about this example is that is the only one to include the saba-like descending phrase with *d*♭.[27] The continuation of the descent after *A* may be identified as a return to 40. ırak, the main mode of the piece, and it is accordingly omitted from ex. 18. Included, on the other hand, is a comparable descent in 22 Mg (following an ascending flourish containing, incidentally, the only instance of *d* which, following Cantemir's prescription, nowhere appears in descent). This goes from *A* to *E*, and is possibly to be regarded as a minimal insertion of 5. aşiran; but whatever its modal identity it might be thought a little awkward here, resulting as it does in the unusual following jump of a minor ninth.

Ex. 18 introduces the practice of providing literal references for repeated material:



Example 18

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[25] چارکاهدن صبا یوزیندن دوکاه قرارینه وارر .

[26] نتیجهٔ کلام کوچك اولور که حسینی پرده سندن بردن بره چارکاهه دوشر .
The whole passage is translated in Feldman, op. cit., p. 248.

[27] The same melodic outline occurs in 96 H2, which may therefore be identified as a modulation into kuçek.

We now turn to the two modes appearing only as the principal mode of a single piece.

9. salmak

For Cantemir (p. 52) salmak is one of the terkibs of 48. rast, but his description of it is analogous to those previously given for the modes classed as makams. It adheres to a standard bipartite format consisting of a brief, often laconic initial statement, termed *teşrīḥ* ('anatomy'), which lists essential features from which a kernel definition can be derived, followed by a supplementary statement, termed *ḥüküm* ('authority', invoking an equally clear but quite unrelated metaphor), which may indicate a wider domain of pitches available outside the kernel, and will sometimes supply further information about melodic movement. These two elements will be referred to henceforth as the nuclear and expanded statements respectively.

In the nuclear statement, then, we are informed that salmak has initial *d*, continues with main notes like rast, and has finalis *G*; and in the expansion that in ascent it uses *c‡* and *f‡*, and descends as before (*ol yoldan*), presumably, therefore, with *f#* and *c*, to *G*. The first part of this account is coherent, clear, and is in evident accord with the notation. The second, though, is initially puzzling, for in 124, the one piece to exemplify salmak, *c‡* and *f‡* (as distinct from *F‡*) occur in neither H1 nor M, where the core features of a mode are normally displayed. But they do appear in H2 and H3, either singly or together, and because of Cantemir's reference to them these sections should be considered potentially integral to salmak rather than the modulations they at first sight appear to be. Without them, given that rast is frequently characterized by an initial ascent from *G* to *d* and has *G* as finalis, it might have been tempting to consider salmak no more than an acephalic derivate of rast and delay consideration accordingly, but such pitch-set distinctions are sufficient justification for keeping it apart.

Faced with a complete piece, the general question arises of how much of it is to be examined and in how many stages. H1 + M may sometimes be regarded as a single block providing the basic exposition, but usually as a compound of basic exposition and elaboration, in which case initial examination may not need to cover more than part of this area. The remaining sections will frequently be characterized by a shift to a higher register and/or modulation. If the former, it will generally be convenient to consider the material separately; and if the latter we may simply disregard it (but possibly revert to it when considering the makam with which the modulating section may be identified). In the present instance the pitch-set changes exhibited by H2 and H3 indicate a second zone which, even if possibly inherent in the mode, may best be treated separately.

The material contained in 124 H1 + M consists of four cycles of sakil, which has 48 time units. There is a correspondingly large number of potentially prominent nodes, and comparisons between the rhythmic articulation of the melody in various pieces does not lead to certain conclusions. However, the most likely candidates appear to be time units 9, 17, 25, 33, and 45, and the material in ex. 19 is displayed accordingly.[28] The picture this provides is broadly in accord with Cantemir's nuclear statement, although it fails to mention the *G* - *e*

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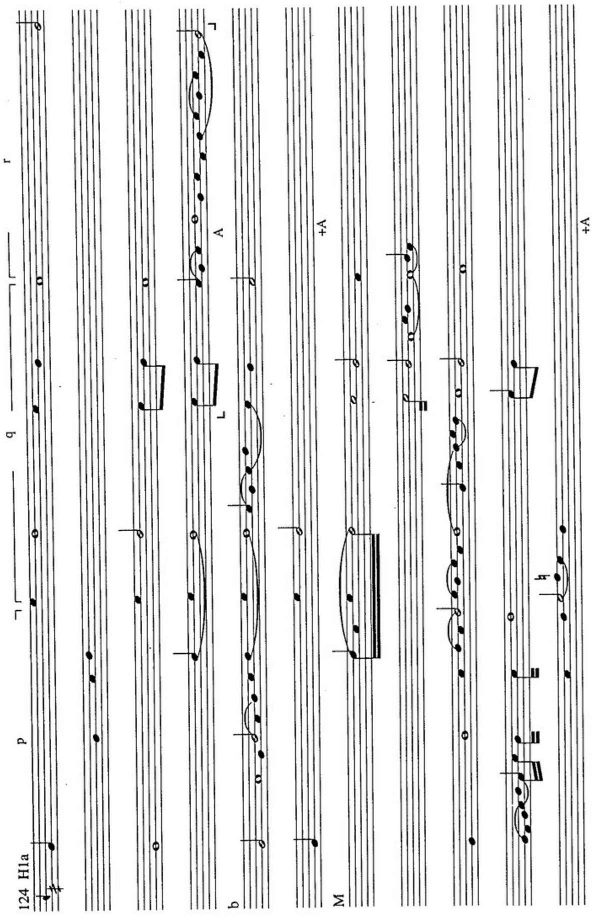
[28] The suggestion is, therefore, that the predominant pattern is for the melody to be articulated in units of eight time units, even though this goes against the pattern suggested by the percussion underlay. For further discussion see 3.6.17.



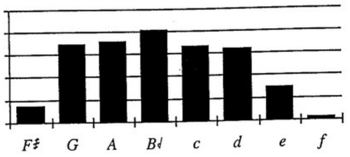
Example 19

leap (reinforcing the link with rast) that precedes his initial *d*. But of particular interest here is to observe in the context of an extended block of material a compositional strategy of gradual elaboration of particular segments interspersed with literal repetition and, within that block, to examine the relationship between H1 and M. It may be assumed that the former will present enough essential features for identification, so that the underlying structure of the mode should be largely derivable from this information alone. But M, which will end the piece, must also be a mainstream formulation, and therefore presents the composer with the challenge of avoiding too great a degree of repetition (and consequent boredom) while still adhering closely to the fundamentals of the mode already displayed in H1.

In the case of 124 these consist of three elements (p, q, r), presented in immediate succession: a rising *G* - *e* sixth leading to prominent *d*, a descent to prominent *A*, and a further descent to finalis *G*. Where literal repetition occurs, it is mainly of an extended cadence which is a non mode- or rhythmic cycle-specific formula[29] extending as far back as the first *G* in the area marked A in ex. 19 (section-final repetition here thus slightly exceeds what is specified by the pre-composed formula). This is preceded in H1a by a simple and almost unvaried second and third statement of q, the second being preceded by p, and p by a rising three-note figure which will subsequently be elaborated in H1b to fill in the initial rising sixth of p and thus be integrated with it. H1b also elaborates q somewhat before concluding with a literal repeat of q + r.

M is a single through-composed unit of two cycles (in which the onset of the second is not even marked by a separate attack) and may be viewed as a more complex set of variations on p and q. As might be expected, the filling in or elaboration is achieved by a limited number of devices which, like r, constitute formulae occurring throughout the repertoire (the nature and distribution of which will be explored in 3.6), but it may be noted here that the conventional cadence already occupies the last 15 time units of the cycles in which it occurs, thereby accounting for nearly 20% of the whole piece.

In the following display of the relative duration of the various pitches the vertical gradations indicate 5% steps (so that *B𝄳* accounts for just over 20% of the total):



There is thus considerable uniformity over the *G* - *d* pentachord, but with a peak on *B𝄳* that differentiates the profile of this piece somewhat from that of rast without being sufficiently

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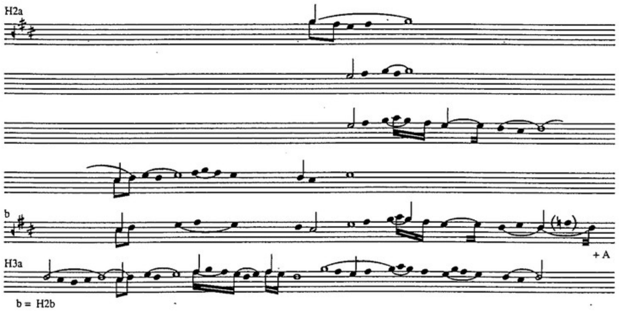
[29] Indeed, such is the regularity of this formula that the *B𝄳* at H1a: 41 must be considered suspect (although perfectly clear in the original), and in ex. 19 only one version has been given, the form found in all other cases, which has *G* at this point.

pronounced to suggest 45. segâh. But the profiles for these modes are averages taken from quite large samples, and could therefore mask invidual instances where the similarities are rather more pronounced, so that even if relative duration is a useful index it is not wholly reliable as a diagnostic tool and cannot be used alone as a means of identification.

Without Cantemir's remark about the inclusion in ascent of *c𝄲* and *f𝄲* the obvious conclusion would be that H2 and H3 are, rather unusually, both modulations, H2 into 23. mahur, H3 into 31. uzzal. Otherwise one might have expected him to classify salmak as a compound mode, for given the evidently prominent role of *e* in H2, for example, together with the change in pitch set and register, there is no continuity or overlap before the final descent and cadence. Nevertheless, in the light of Cantemir's description we should presume that H2 is also representative of salmak, with the substitution of *f♯* for *f𝄲* in H2b marking a return to the pitch set of rast and preparing for the concluding cadential repetition of material from H1 and M. As ex. 20 demonstrates, the similarities (and partial identities) in the way material is developed in H2 and H3 are striking:



Example 20

But it should be observed that of itself this cannot be taken as evidence for modal unity, so that from the presumption that H2 is, in context, non-modulatory, however much it may resemble mahur, the same does not necessarily follow for H3. In fact, it is by no means rare for a modulatory passage to mimic preceding material, sometimes even keeping the exact sequence of melodic steps, with the same rhythmic organization, but utilizing a different pitch set,[30] and there is therefore no reason to call into question the status of H3a as what it appears most obviously to be, a modulation into uzzal.

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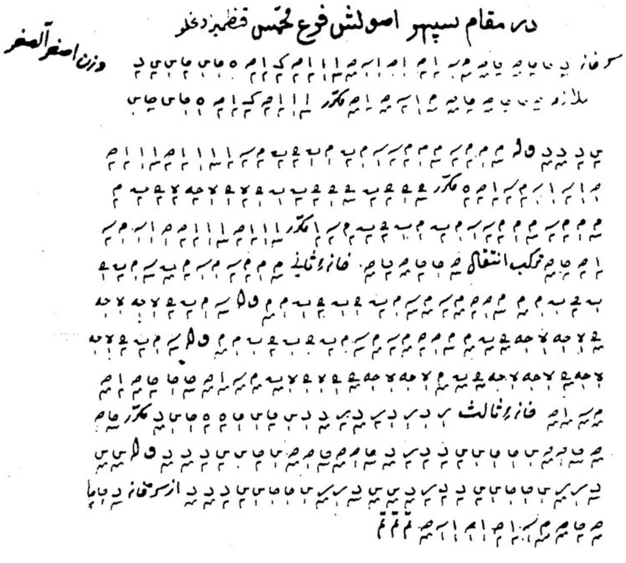
[30] Cf. e.g. 94 H1 and H3, 120 H2c and H3c.



The notation of 336, in sipihr

10. sipihr

For Cantemir (p. 27) sipihr is an 'unused' terkib with finalis *A* and, predictably, he provides no description—a state of affairs which would be less unexpected had this solitary example of it, 336, not had his own name in the heading. But as with 7. şiraz he does include a brief outline (p. 75) in the material quoted from earlier authorities, and according to this from initial *a* sipihr proceeds like hisar and concludes like kuçek.[31] However, the equivalent description of hisar (p. 73) seems to bear little resemblance to the examples in Cantemir's notations, even if that of (zirefken) kuçek (p. 71) is rather closer, and it is thus hardly surprising to find that taken together they fail to illuminate the structure of 336. Unusual in 336 is the prolonged exploration of the high register in M, especially given that H2 will be exclusively devoted to it. But rather than a modal requirement this may represent a deliberate compositional strategy, counterbalanced later by emphasis on the low register in H3, which may reasonably be considered modulatory (into 55. uşşak and 58. hüseyni). But even excluding H3, we appear to be confronted in sipihr, as exemplified in here, with another compound (of elements of hüseyni, 33. şehnaz and, in the highest register, 27. buselik), this time one with the different elements juxtaposed rather than segregated into various sections.

The rhythmic cycle, fer'-i muhammes, is rare, there being only two other examples. But in all three cases the melodic outline suggests fairly strongly that it should be viewed as 8 + 8, so that time unit 9 is deemed prominent in ex. 21, which includes H2.

Striking in this piece are the opening fanfare-like arpeggiated motif and, in Mb, the extended sequences forming a chain of thirds, (*a* - *f*𝄲) - (*c'* - *a*). Melodically the remainder seems more conventional, being made up of descending (sometimes preceded by ascending) scalar material giving prominence, like the initial fanfare, to *a*, *e* and *A*, while the descending cadence, essentially *c B*𝄳 *A*, conventionally positioned so that the finalis is reached on time unit 12, is one of the most common in the whole collection. However, whereas the more extended cadence in salmak concluded each section (and each of the subsections of H1), thus providing a very clear set of formal demarcations, here both H2 and H3 end rather with a bridge passage reverting to, and in the second case being a literal repeat of, the first cycle of H1, so that there is an emphasis rather on smoothness of transition. But this is also a feature of the transition from H1 to M, the first cycle of which is a variation of that of H1, and it may be suspected, because of the inordinate amount of repetition that would otherwise result, that these bridge passages are meant not to lead into, but to be substituted for, the beginning of M1. In any event, it is clear that the relationship between H1 and M differs considerably from that in the preceding example, where the latter is essentially an elaboration of material in the former. Here M begins and ends with an almost exact repetition of H1, but has a clearly contrastive central section introducing new material and a change of register which will be further developed in H2, where the compositional process consists of small-scale variations affecting rhythmic articulation rather more than melodic outline.

In the following display of relative duration for H1 and M, *g*, occupying three time units, has been subsumed under *g*♯. We thus have:[32]

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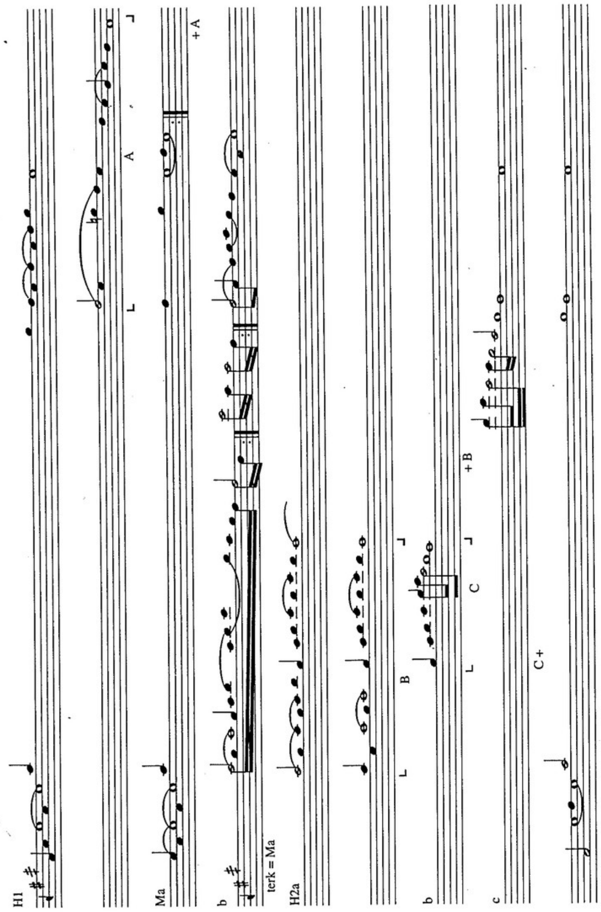
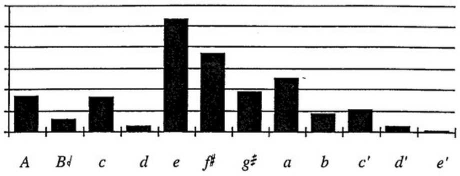
[31] سپهر تیز دوکاهدن حرکت ایدوب حصار کبی کوچك یوزندن قرار ایدر .

[32] The breakdown for each subsection, the figures representing the total number of time units, is as follows:

	A	*B*𝄳	*c*	*d*	*e*	*f*𝄲	*g*♯	*a*	*b*	*c'*	*d'*	*e'*
H1	6.5	2	4	0.5	9.5	6	2	1.5	0	0	0	0
Ma	5	2	6.5	0.5	21	7	3	3	0	0	0	0
Mb	5	2	5	1.5	20.5	23	13	20	6.5	10	2.5	1
	16.5	6	15.5	2.5	51	36	18	24.5	6.5	10	2.5	1



Example 21



This shows clearly the importance of the *e* - *a* tetrachord and, within it, the salience of *e*. The point worth noting, rather, is the relative weakness of the secondary note *g*𝄲 as against its main-note neighbour *f*♯.

2.2.2 *Modes 2*

There are a further four modes which occur as the main mode in only one piece, but are additionally represented by a short appearance in one of the külliyat, 296. In one case, however, that of maye, there is a sufficiently strong similarity with another mode, 45. segâh, to warrant deferral, so that only three, bestenigar, büzürk and zirefken, will be considered at this stage.

11. bestenigar

For Cantemir (pp. 45-6) this belongs to the pseudo-makam category, or more precisely that of a mode that 'has the appearance of a makam' (*ṣūreta maḳām*), defined as a parasitic form the melodic articulation of which uses the notes of another mode.[33] That is, it is functionally equivalent but lacks any pitch-set discrimination marking it off from another mode of makam status (and evidently one regarded as pre-existing or logically prior and more important), in this case 18. hisar. The points of difference, we are told, are that bestenigar has *B*𝄳 as finalis in place of the *A* of hisar, and that it substitutes *d* for *d*𝄲.[34] The first is unexceptional, but the second seems positively bizarre: *d*𝄲 is actually called hisar, and it provides the most characteristic feature of the eponymous mode: not to use it would appear to sever the putative link, already weakened by the fact that whereas hisar has *g*𝄲, bestenigar, according to Cantemir's brief accompanying description, begins on *g* and then, using the main notes, descends to the finalis *B*𝄳. The logic of the *ṣūreta maḳām* category would seem to suggest, rather, that bestenigar is parasitic upon the territory of 44. eviç and 45. segâh. Nor are there any

[33] صورتا مقام اولدر كه بر مقامك نغمه سنى غير مقامك پرده لرى ايله اجرا وبيان ايدر .
This category is rendered by Feldman, op. cit., p. 228 as 'simulated *makam*'.

[34] تشريخ بسته نكار صورتا مقام مقام مرقوم حصار مقامك دوكاه پرده سنك قراركاهى سكاه پرده سنك قراركاهنه تبديل ايدوب وحصار پرده سنك نوا پرده سنه دكشندرر .

obviously similar features of melodic structure between bestenigar and hisar which might override the dissimilarities in their respective pitch sets. The puzzle is apparently solved by an interesting later remark to the effect that singers would begin bestenigar with *d*𝄲, but as a solution this is still rather quirky, for assuming, the absence of this initial gesture apart, that the two instrumental examples included by Cantemir are representative of bestenigar as used in the vocal repertoire, it remains the case that other classifications would commend themselves as superior unless specific reference to *d*𝄲 was considered so essential that all other factors could be disregarded.

There is one further complication. We are informed of considerable disagreement among contemporary musicians about bestenigar, although in the event the difference is perceived as largely one of register: for some it begins a fifth lower, on *c*, and descends to finalis *F*♯.[35] But this second version is hardly, as Cantemir suggests, no more than an obvious transposition of the first, for even if the general profile is similar the range is reduced.

The rhythmic cycle in 281, the one piece in bestenigar, is berefşan. This is perhaps the most regular of all in terms of melodic patterning, and in most cycles the distribution of duration, allied to the *düm tek* underlay of percussions, allows us to identify as the prominent nodes time units 4, 7, 9 and 13. In 281 there is no M, and ex. 22 accordingly displays the material in H1 together with the exemplification in 296.

Whereas the distribution of material in 10. sipihr differed quite markedly from that encountered in 9. salmak, ex. 22 suggests something less remote. In relation to the tripartite arch structure of salmak (in any case to be invoked less as a template than a heuristic model), bestenigar appears initially to be acephalic, consisting only of q + r, and with no very clear dividing line between those either. However, although it clearly lacks an initial ascent, it would appear reasonable to identify as an equivalent segment to p the initial elaboration of *f*♯, and to regard q as covering the (generally brief) descent to *d*, with r a more extended area calling upon three different cadence formulae. But whether or not such a segmentation carries conviction it is evident that there is a pattern of prominence stressing the descending triad *f*♯ *d B*𝄳.

The cadence in 296 includes *e*♭, but even if produced on Cantemir's tanbur with the same fret as the *d*𝄲 of hisar it is functionally quite distinct and not at all suggestive of a link between the two modes.[36] *e*♭ appears again in 281 H3, but as it is not there confined to the cadence area it serves, rather, to signal that H3 is modulatory (even if its modal identity is rather uncertain).[37] Cantemir says nothing about possible extensions to the range of bestenigar, but in 281 one may note a brief descent to *G* (presumably a further extension of q) which occurs in H1c and d. Nor does he say anything about the prominence of the initial *f*♯ (for him *g* is

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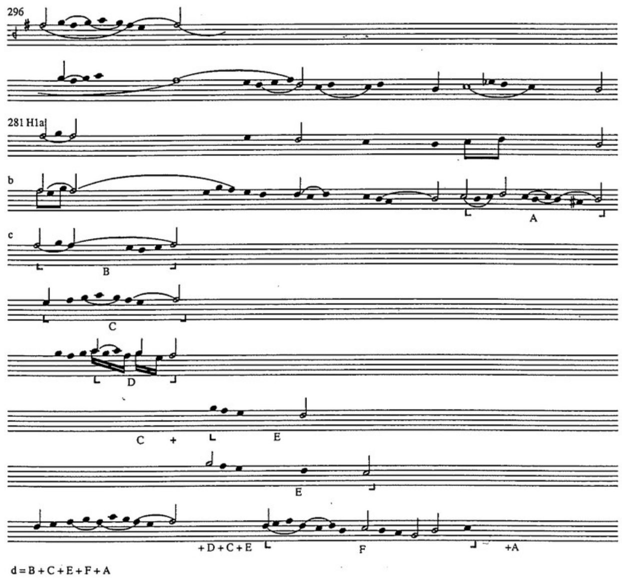
[35] بو زمانه نك اهل موسيقارى بو مقامك اجراسنى ايچون چوق مجادله ايدرلر ، زيرا بعضيسى حركت اغازه سنى چاركاه پردهسندن شروع ايدوب عراق پرده سنده قرار ايدر ديمك استرلر.

[36] In occurs in the context of a cadence formula which more commonly appears a fourth lower, in 40. ırak.

[37] It appears at first sight to be a cross between segâh and 26. beyati, but for the most part can be thought of as a variant of segâh or, more precisely, a varied transposition of material in H2, which places the same ırak descent in the upper octave. However, this does not account for the occurrence of *e*♭ in H3c, where it does not lead to a cadence, but is at the same time too prominent to suggest an identification with beyati.



Example 22

initial), which emerges again very clearly from the following display of relative duration in 296 and 281 H1:[38]

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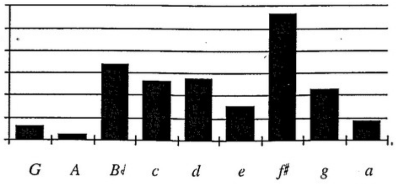
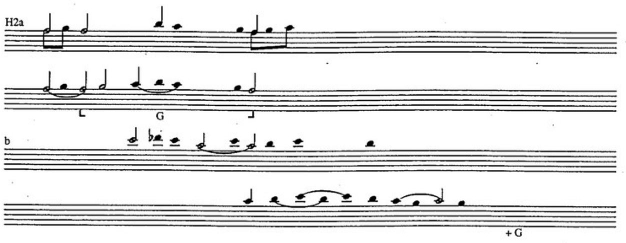
[38] The breakdown for each, the figures representing the total number of time units, is as follows:

	G	*A*	*B*𝄳	*c*	*d*	*e*	*f*♯	*g*	*a*
296	0	0	6	4	4	2.25	10.25	2.5	1
H1	$\frac{7}{7}$	$\frac{3}{3}$	$\frac{31.5}{37.5}$	$\frac{25.5}{29.5}$	$\frac{26.5}{30.5}$	$\frac{15}{17.25}$	$\frac{52.25}{62.5}$	$\frac{22.75}{25.25}$	$\frac{8.5}{9.5}$



281 H2, which explores the register above *f♯*, is again more economical in its material:



Example 23

H2b is positioned here quite arbitrarily in relation to H2a, which may be viewed as an extended double elaboration of the *f♯* - *g* - *f♯* beginning of H1: the implication is that until it repeats the cadential material H2b can be viewed as a partial echo a third higher. In fact, despite the presence of *b♭* rather than *b𝄳* it is tempting to think of it as an octave displacement of the second version reported by Cantemir as being favoured by some musicians, beginning as it does on *c'* and ending on *f♯*.[39] In any event, it is interesting to note here in another of Cantemir's own compositions the same distribution of emphasis as in the high register of 10. sipihr, viz. on *c'*, *a* and *f♯*, a third apart, so that the whole piece develops a chain of thirds.[40]

As a likely modulation into bestenigar may be identified 100 H3b, which could be plotted quite comfortably onto ex. 22.

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[39] If so, it would suggest that in place of *B𝄳* and *G*, which would correspond to *f♯* and *d* in H1, the prominent notes in this second version are likely to have been *c* and *A*.

[40] See also the discussion of H2 in 45. segâh.

12. büzürk

From Cantemir's opening qualification (p. 51) expressing uncertainty about the nature of this terkib is to be inferred, as the notations confirm, that it was somewhat rare. But uncertainty is no sooner evoked than banished, for the following description is confidently stated to be accurate: beginning like 27. buselik (i.e. with *B* rather than *B𝄳*), büzürk descends through *A*, *G* and *F♯* to *E*, and then returns like 49. rehavi to finalis *G* (this last comment suggesting a concluding *D* - *G* jump rather than any ascending scale movement). The first part of this definition is well exemplified in 296, but this has finalis *E* and there is no sign of a final rehavi-like segment. 332 on the other hand, the one complete piece in this mode—again by Cantemir himself—conforms rather less well: not only is there no hint of rehavi, there is only the faintest trace of a descent to *E* (and then with *G𝄰* rather than *G*). Indeed, on the basis of the evidence provided by 332, it is precisely the frequent occurrence of *G𝄰* functioning as a leading note to *A* that most obviously distinguishes büzürk from buselik, with which its pitch set is otherwise identical.[41]

In 332 the pitch set remains the same in both H2 and H3, and there is no clear evidence of modulation. The narrow range of much of H3 might hint at 1. hüzzam transposed down a fourth, but on balance there seems to be no compelling reason not to deem the piece representative of büzürk throughout. The compound cycle in which it is set, darbeyn,[42] is made up of berefşan (encountered above in bestenigar) preceded by devr-i kebir.. In earlier pieces the accentuation of the latter is quite clear, the internally prominent nodes being at time units 4, 8 and 11, and although a slightly different pattern emerges in other late pieces, including ones by Cantemir, in the present case 4, 8 and 11 seem more appropriate, and it is these that are marked in ex. 24. As this shows, the exemplification of büzürk in 296 contrasts markedly with that in 332 not only with respect to pitch-set differences but also in terms of modal structure, to the extent that it bears a greater resemblance to the lower register of buselik aşirani which is, indeed, the mode that immediately follows it in 296. Given its brevity it would be rash to conclude that it provides adequate evidence of discontinuity, but no better explanation immediately presents itself. Nor is there a ready solution to the puzzle presented by Cantemir's description of this mode, for this conforms more closely to the version in 296 that to that in his own piece. The obvious conclusion would be that in this case he is relaying a traditional formulation, relying on earlier definitions, whether transmitted orally or in writing, still appropriate to one or two older pieces in the repertoire but, so the evidence of 332 suggests, consistently flouted by more recent developments to which his own compositional practice bears witness. However, this line of reasoning fails for the simple reason that 296 cannot be characterized as one of the older or more conservative pieces in the repertoire: as will be seen, in other cases where there is evidence for historical change it is in 296 that we normally encounter the innovations. We are simply left with the uncomfortable juxtaposition of two rather different forms.

296 consists of a repeated (and varied) descent from *c* to *G* and then to *E*, while 332 is

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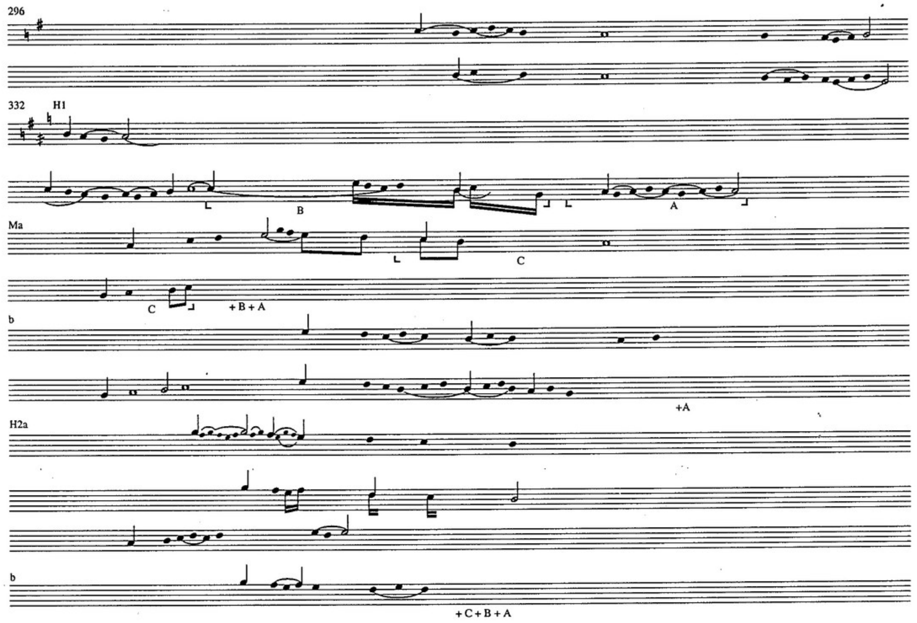
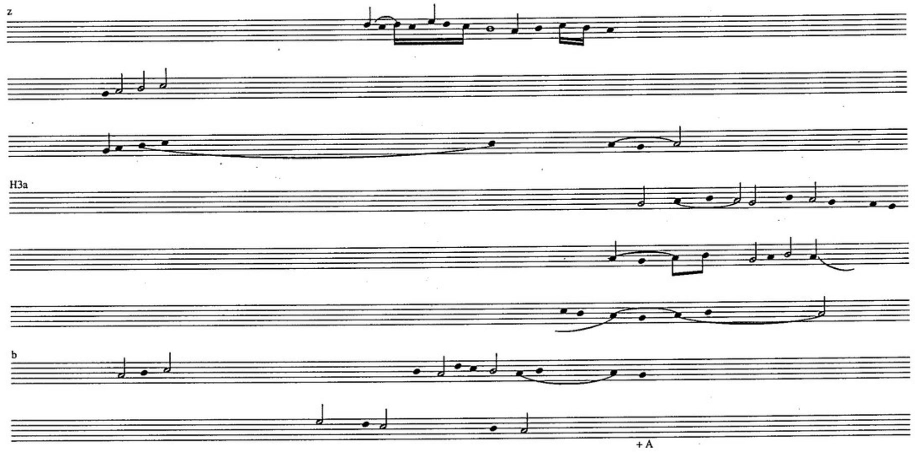
[41] In buselik *G* is fairly frequent and *G𝄰* absent, except, interestingly, in another composition by Cantemir, 335, where it appears in the cadence.

[42] The heading darbeyn-i cedid given in Part i is almost certainly misleading. The adjective *cedîd* ('new') is best understood as applying not specifically to the rhythmic cycle but to the piece.

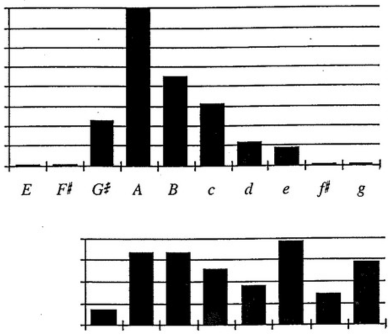


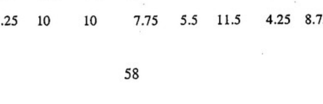


Example 24

concerned primarily in H1 with the area from *c* to *A*, with *G♯* as leading note, which despite its narrow compass can again be seen to develop in an essentially arch-like form terminated by a lengthy cadence stretching over 11 time units. This, with only a trivial variation in H3b, also concludes every other section except Z, thus conferring on the piece a quite traditional formal design.[43] The arch form is extended in compass at the beginning of Ma to *A - e - A*, and further developed in Mb. The structure of H2, on the other hand, resembles that of bestenigar, with initial emphasis on a high register note (in this case *g*, the elaboration of which uses only the notes below it) followed by a descent (to *B*). Z begins with a fragment of this material but reverts in its second cycle to the core *A - c* area which is then further developed in H3, with more emphasis on *G♯* and a very brief excursion into the lower register.

The durational salience of *A* is marked throughout 332, as is clear from the following displays of relative duration, the second of which is for H2. The first thus covers H1, M, Z and H3:[44]





Apart from H2, therefore, no less than 89% of the material is distributed over the basic *G♯*, *A*, *B* and *c* pitch set. But in H2 the equivalent figure is still 50%, the initial emphasis on the upper register thus being counterbalanced by the lower register conclusion. In the light of the prominence accorded in previous cases to notes a third apart in the upper register it is interesting to note here that greater durational salience is attached to *g*, *e* and *c* (which account between them for almost 47% of the whole) than to *f♯* and *d*.

13. ẕirefken

This mode is first mentioned by Cantemir (p. 27) among the group of 'unused' terkibs with finalis *A*, but is later (pp. 45-6) paired with bestenigar to form the group of pseudo-modes, those that 'have the appearance of a makam' (*ṣūreta maḳām*). Again, as with bestenigar, two forms are mentioned: one begins on *e'* and descends to *A*, while the other, which Cantemir expressly prefers, begins on *a* and descends to *E*. It is described as descending with main notes to *c* and then proceeding *B G F♯ E*, and the omission of *A* is reinforced by the further comment (pp. 46-7) that it differs from buselik aşirani in that latter includes *A*.[45]

Within the corpus of notations zirefken is exemplified by 219 and 296, both of which may be related to Cantemir's preferred version. Indeed, 219 corresponds to this description very closely, and the omission of *A* in descent is one of its most obvious features. Not so, however, in 296: here zirefken immediately follows 28. buselik aşirani and is not so readily to be distinguished from it, for although *G* is given greater prominence in descent there is no avoidance of *A*, which indeed functions as the finalis in the second cycle.

The rhythmic cycle in 219 is hafif, in which the internally prominent nodes appear to be situated at time units 9, 17 and 29, as marked in ex. 25. Apparent from this is that apart from the major difference caused by the inclusion of (and prominence accorded to) *A* in the descending line of 296, there is—almost unexpectedly given previous instances of lack of congruence—a remarkable similarity in the general morphology of 296 and 219 H1. Both begin with an unusual feature not mentioned by Cantemir, a leap of an eleventh from what will turn out to be the finalis *E* to *a*, followed by a brief descent to a prominent *e*, which in terms of a possible ternary analysis can be regarded as marking off the initial area (p). The remainder consists of a descent to *E*, but readily divisible into two parts, the first (q) a more elaborated descent, to *B* in 219 and *A* in 296, the second the following cadential area (r) characterized by elaboration of what might be anticipated to be the finalis, *G*, followed by an abrupt descent to the real finalis, *E*.[46]

219 M is concerned essentially with further elaboration of q, while in H2a attention switches to p, with variants of the second, filled-in version in H1, a simple rising-falling

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[43] Reinforced by internal repetition: Ma repeats H1 2 while H2b in turn repeats this and the end of Ma 1.

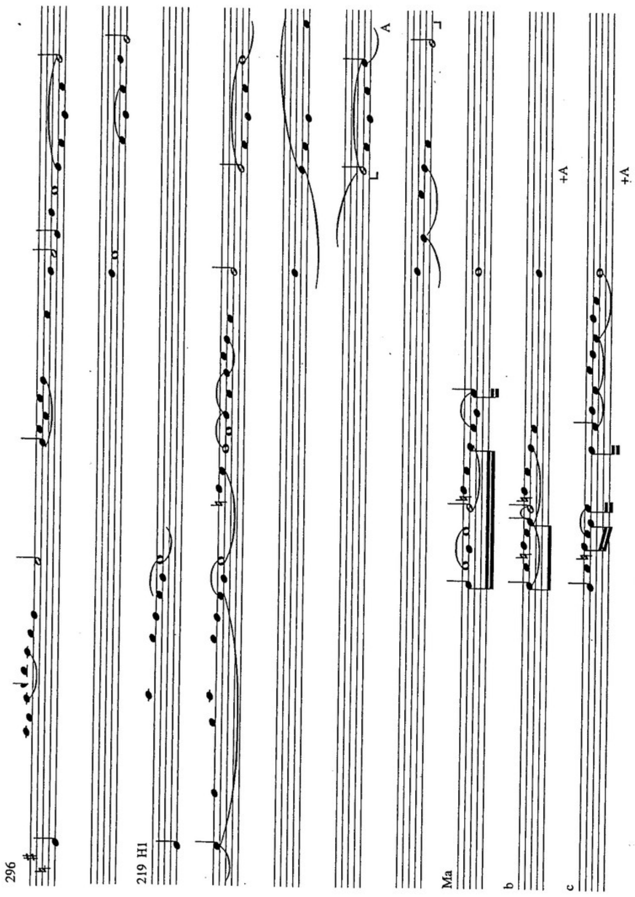
[44] The breakdown for each subsection is as follows:

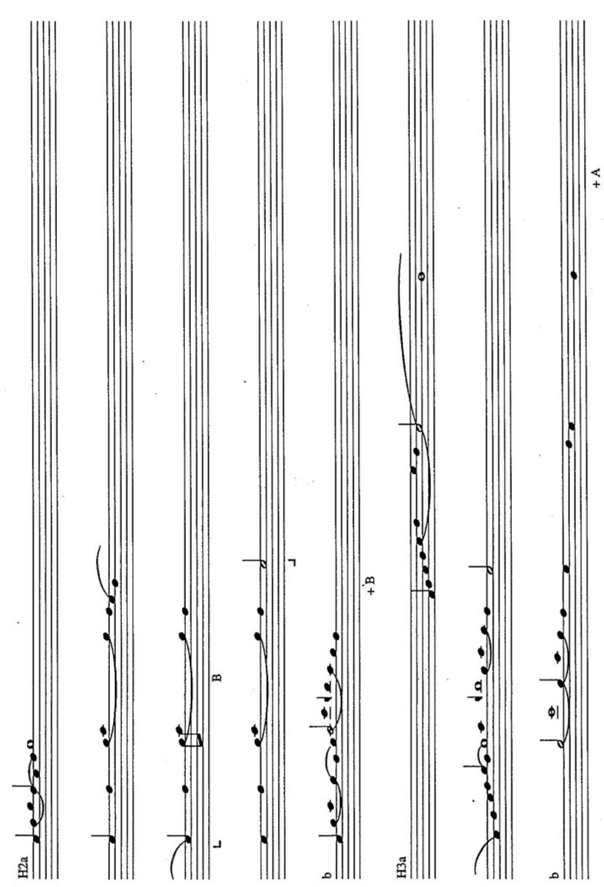
	E	*F♯*	*G♯*	*A*	*B*	*c*	*d*	*e*	*f♯*	*g*
H1	0	0	3.75	13.75	6.5	4.75	1	0.25	0	0
M	0	0	4.75	20.5	14.75	10.25	4.5	4.75	0.25	0.25
Z	0	0	2.25	9	7.75	6.75	3.25	1	0	0
H3	0.5	0.5	9.5	28.25	11.5	6.25	1.5	2	0	0
	0.5	0.5	20.25	71.5	40.5	28	10.25	8	0.25	0.25
H2	0	0	2.25	10	10	7.75	5.5	11.5	4.25	8.75

[45] In the other version it is described as descending like sünbüle with main notes to *g*, followed by *f e d c B♭ A*. There is no reference to a note being omitted. *f* is regarded as a transposition/equivalent of *B* (that is, it is the secondary note the inclusion of which allows the transposition of buselik), while *A* is equivalent to *E* in the first version:

بو جنس حركتده نظر قل كه عجم پرده سى شد يوزيندن بوسلك پرده سى اولوب بوسلك مقامك نغمه سى اجرا اولنور ودوكاه پرده سى
عشيران پرده سنك قيافته كيرر .

[46] In 219 H1 2 the elaboration of *G* occupies time units 1-27, while *E* is reached only on time unit 29. The second half of this cycle reappears as the cadence area in a further three (sub)sections.

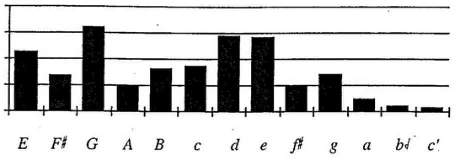


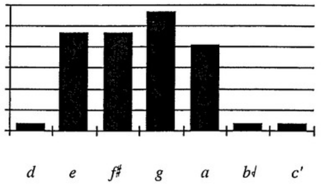


Example 25

outline of the *e* - *a* tetrachord. H2b then begins with an exact restatement of the beginning of H2a one tone higher (hence its position in ex. 25), thereby giving prominence to *a*. In H3 we have a rather freer development of p and q, with an important role being assigned to scalar link passages, while the beginning of 2 invokes a general melodic-rhythmic formula giving emphasis to *g*.

Subsuming *f* under *f*♯ and omitting *D* (one time unit only, in H1) the displays of relative duration, the second of which is for H2, are as follows:[47]





These manifestations of zirefken thus reveal a rather more even distribution than hitherto, although with obvious peaks and troughs (and without 296 that for *A* would be much deeper). They also differ from the previous examples in indicating in the upper register no particular emphasis on notes a third apart.

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[47] The breakdown for each section is as follows:

		E	*F*♯	*G*	*A*	*B*	*c*	*d*	*e*	*f*♯	*g*	*a*	*b*♭	*c'*
296		6.5	2	8	8	1.5	2	2.5	5	0.5	2	1.5	0.5	0
219	H1	8	6	15	1	6	3.5	6	10	3.5	2.5	1.5	0	0
	M	10	6	12	2	5.5	5.5	12	7	4	0	0	0	0
	H3	5	4	7	2	5	5	4	7	4	14	3	2	2
		29.5	18	42	13	21	23	37.5	37	13	18.5	6	2.5	2
	H2	0	0	0	0	0	1	15	15	18	13	1	1	0

2.2.3 *Modes 3*

Five modes, çargâh, geveşt, ısfahan, hisar and nihavent, appear as the main mode in two compositions each, thus increasing dramatically the amount of material available for scrutiny. For each there is also an illustration in one of the külliyat pieces, 296. A case could be made for postponing nihavent in order to examine it in conjunction with 22. kürdi, but given the variations in the pitch-set of the latter there is equal justification for considering it separately. For hisar yet further material is found elsewhere, for it is also named in another külliyat, 22, while in 12, the bulk of which is in 25. saba, most of M is in hisar (an unusual feature leading to the piece being called, or labelled, mülâzime-yi hisar). Accordingly, it will be held back to the end of the group.

14. çargâh

Cantemir includes çargâh (pp. 29-30) among the first set of modes in his sevenfold classification, that comprising lower-register modes using only main notes. The nuclear description confines itself to emphasizing the pivotal role of the eponymous *c*, whatever the direction of the melody.[48] The expansion confirms that there were no restrictions of range, but is concerned primarily to account for the infrequency of çargâh, the reason given being that no other modes share the same finalis (which, as the notations confirm, was also *c*): it has, therefore, no modulatory family of terkibs.[49]

The brief exemplification given in 296 conforms fully to Cantemir's account: it has *c* as both initial and finalis and, except for the readily explicable inclusion of *f* in the cadence area, uses only main notes. However, the two complete pieces in çargâh, 189 and 190, use *f* throughout, thus casting doubt on Cantemir's classification: on the basis of the evidence they provide çargâh would seem to be better placed in the category of modes using secondary notes or, more precisely, set alongside bestenigar and zirefken as a pseudo-makam (*ṣūreta maḳām*), in this case one employing the same pitch set as 35. acem.

The rhythmic cycle of 189 is düyek, for which melodic articulation and the percussion underlay both indicate time unit 5 as the internally prominent node. That of 190 is devr-i kebir (for which see 12. büzürk). In 189 there is no modulation, while in 190 H3 modulates to 25. saba. Excluding this, therefore, the çargâh material may be presented as in ex. 26.

In addition to running counter to Cantemir's definition of the pitch set of çargâh, 189 and 190 may also be said to deviate from it to the extent that they treat the registers on either side of *c* unequally, making generally fewer and briefer excursions below. They could be segmented, by analogy with the patterns previously encountered, into an initial ascent (p) to *g* or *a*, a descent (q), normally to *d* or *c* but optionally to *G*, and a concluding cadence (r) descending to or elaborating *c*. However, it may be argued that such a segmentation smacks of arbitrariness, for there is a greater degree of variation than hitherto, especially in the realization of the material subsumed under p, but also in the ordering of events, and it is

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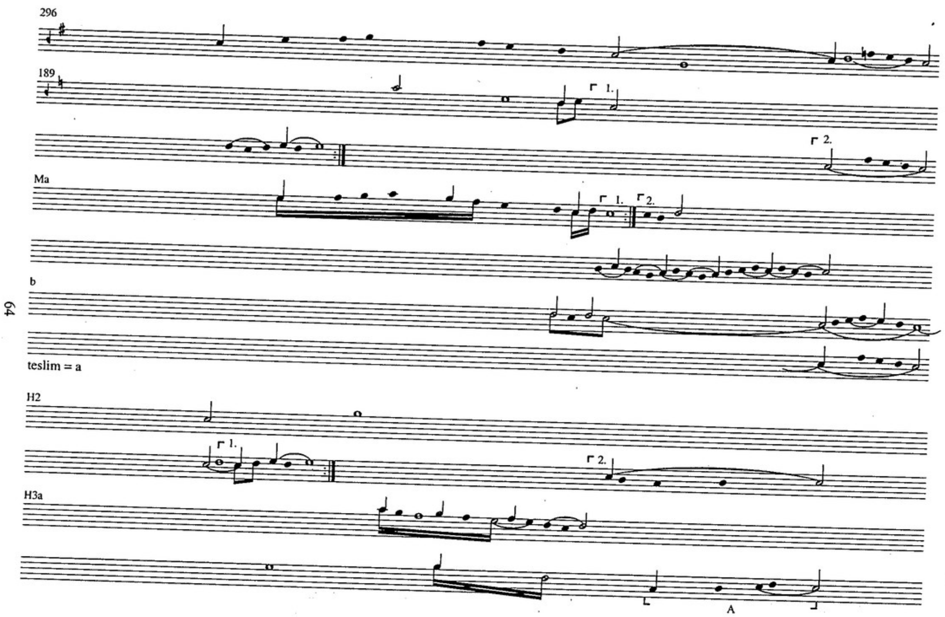
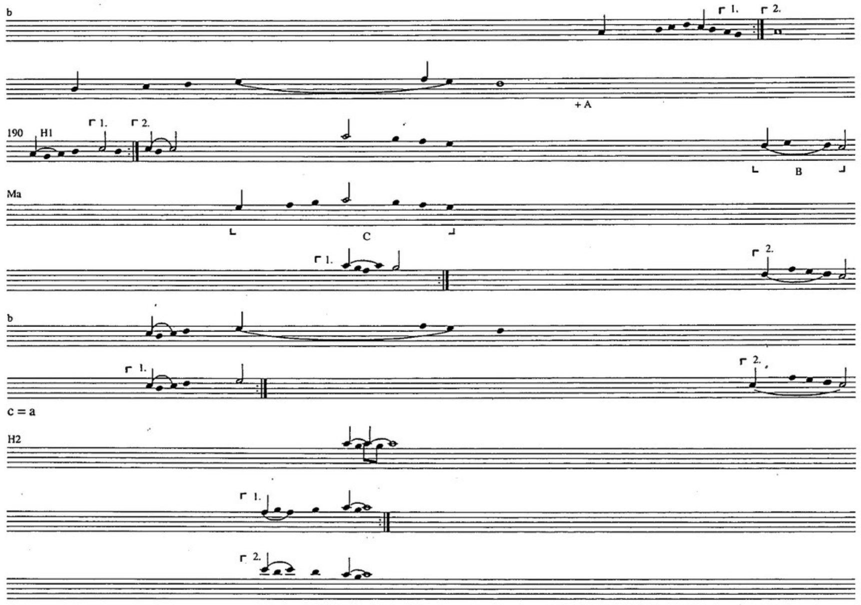
[48] كندو پرده سنى قطب دايره ايدوب كرك نرمدن تيزه كرك تيزدن نرمه وارسه چارگاه پرده سنده كندوى بيان ايدر .

[49] A marginal annotation comments that just one terkib is said to have the same finalis, the otherwise unrecorded and evidently extremely rare or obsolete nihavend-i sagir, which is referred to in the *edvār* only in the material taken from earlier sources (pp. 75-6). The pieces in çargâh contain nothing corresponding to the brief description there given.

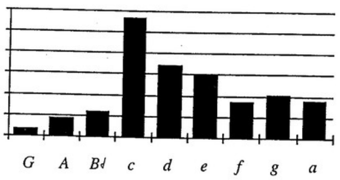




Example 26

important to note that this is not merely a function of the increase in material, for it is manifest within both pieces. Thus 189 begins with q, p then being represented by a brief rising passage leading to the repeat which still only reaches *e*, the higher notes being delayed until Ma; H2 begins with a rising fifth (*c* - *g*), but H3 reverts to initial q. A variant of the ascent, but this time only to *c*, appears at the beginning of 190 H1, but there is then a jump to *a*, and the intermediate area is again filled in in M, first from *e* to *a* (as in 189: here the two pieces are only differentiated rhythmically) and subsequently from *c* to *e*. The overall impression is thus of both fragmentation and flexibility, with *A*, *c*, *e* and *a* all available as points of departure. What has been designated as q exhibits a lesser degree of variability, but there is a parallel contrast in 189 between the initial gapped descent from *a* to *e* and the following filled in versions in M and, with more elaboration, in H3a.

Worth noting in 189 are the large-scale transitions between sections, even if arguably an aspect of form rather than of modal structure. In the absence of any modulation in H3 it might be anticipated that H2 would explore the higher register and H3 present, as in 219 in zirefken, a rather freer exploration of earlier material, but in the event this order is reversed, with the upper register being developed at the beginning of H3. Inclusion of this passage in the display of durational values suggests that it would be illogical to separate off from it the high register material in 190 H2, so that, subsuming *f♯* (which appears only in 296) under *f* and omitting *b𝄳* and *c'* (one and a half time units each) we have:[50]



These figures thus emphasize the relative weakness of the area below *c*, while at the same time underlining, in addition to the already evident salience of *c* itself, the importance of the central *c* - *e* area (which accounts for 60% of the whole, and without the bias to *g* and *a* exhibited in 190 H2 would assume even greater significance).

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[50] The breakdown for each subsection is as follows:

		G	*A*	*B𝄳*	*c*	*d*	*e*	*f*	*g*	*a*
296		2	0	0	9.5	4	2	1	1.5	0
189	H1	0	0	0	11	6	10	1	0	4
	M	4	8	12	40	35	19	10	8	4
	H2	0	1	2	15	7	3	0	4	0
	H3	1	7	7	16	12	10	7	3	1
190	H1	1	3	4	12	1.5	2.5	1	1	2
	M	0	0	1.5	17	9	17	11.5	17	11
	H2	0	0	0	4	1.5	3	3	10.5	17
		8	19	26.5	124.5	76	66.5	38.5	45	39

On the basis of the exemplification of çargâh in 189 and 190 alone it would be difficult to identify with certainty (sub)sections elsewhere as modulations into it. There are, nevertheless, a few likely candidates, (sub)sections that have, in addition to the obvious precondition of the same pitch set, the unusual feature of initial and finalis *c*. Thus H3 of 150 (in, not surprisingly, acem) recalls 189 H2 with its *c* - *g* jump and omission of *a*, while H3a of 153 (again in acem) has initial *c* and a *c* - *g* jump and could likewise be displayed in terms of the format of ex. 26 until the final cadence on *A*, which effects a transition back to (or reclaims it for) the main mode. A further probable instance is H3a of 303 (in ırak).[51]

15. geveşt

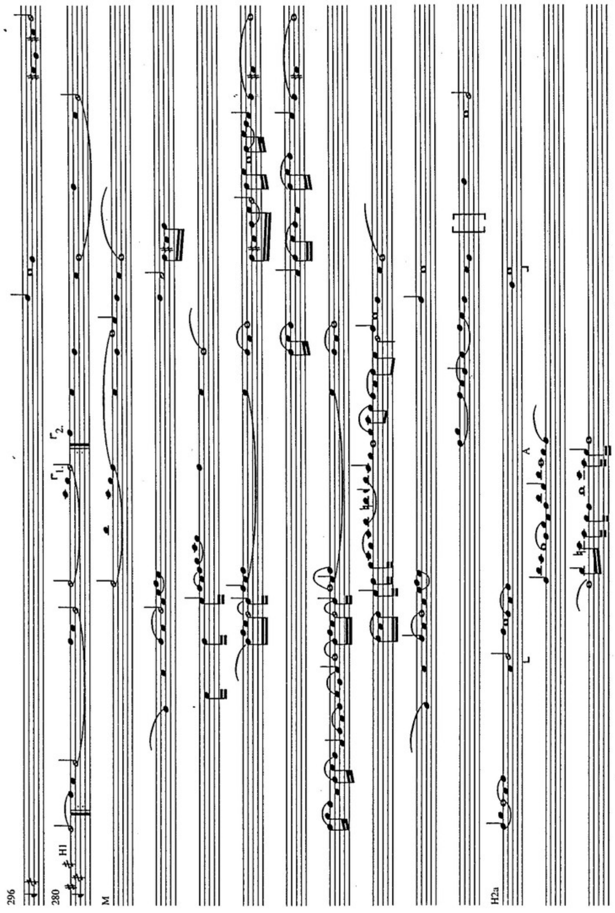
Cantemir's description of this terkib (pp. 51-2) is succinct and precise, yielding the following outline: *f♯ e d c𝄲 B𝄳 A♯ G A♯ B𝄳*, and it is, accordingly, hardly surprising to find that geveşt is mentioned (p. 29) as part of the modulatory family of 45. segâh. It is also hardly surprising, if for wholly different reasons, to find that his own peşrev, 280, cannot quite be accounted for in these terms, for even though it conforms to the extent that it begins on *f♯* and ends on *B𝄳* it fails, as notated, to include the cadential formula encapsulated in the outline, omits *G* entirely, and ascends beyond *f♯*. For illustration of the cadential formula we have to turn to the brief illustration in 296, for it is equally absent from the other complete piece, 284, a semai also to be attributed to Cantemir (see 4.3.2.1). That 296 should consist of little more than this formula (which is preceded only by a *d c𝄲 B𝄳* descent) suggests that it was highly characteristic, so that its omission from the complete pieces is rather puzzling. However, renewed suspicion that Cantemir's verbal outline might be more traditional than his own compositional practice once more runs up against the fact that the element he describes but fails to use appears in a piece that generally contains recent rather than ancient features.

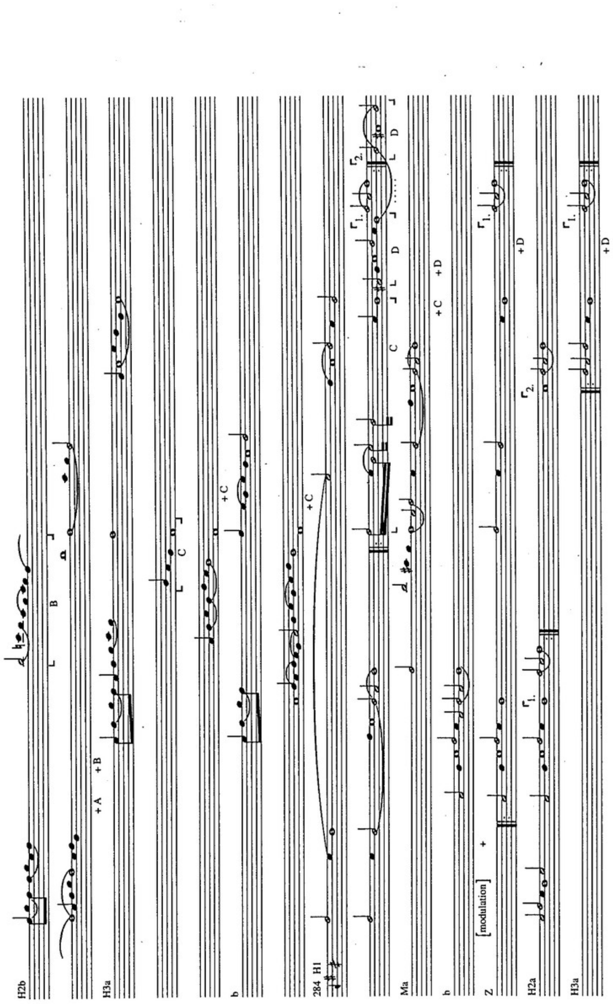
Where 280 and 284 differ is in the pitch set(s) used in the upper register. Accordingly, it may be that in its latest manifestation geveşt was identified essentially with a descending movement through a unique pitch set (from *f♯* to *B𝄳*, with an optional leading-note *A♯*), and that once this was established it could be extended in the upper register in a variety of ways. But even if this interpretation is correct, it is still not possible to determine whether the upper register was freely modulatory or dwelt within a narrow set of possibilities, on the basis of which it might, in Cantemir's terms, be thought of as a compound mode (of the form geveşt proper + (only) a or b or c). The variety of ranges and pitch sets encountered is:

284	*f♯*	*g*			*a♯*	*b𝄳*					(Ma)
	f𝄲	*g*		*a*		*b𝄳*					(Mb; H2b, c; H3c, d)
	f𝄲	*g*		*a*		*b𝄳*			*d♭'*	*d'*	(H3b)
280	*f♯*		*g𝄲*	*a*		*b𝄳*	*b*				(M)
	f♯		*g𝄲*	*a*		*b𝄳*		*c'*			(H2)
	f♯		*g𝄲*	*a*							(H3)

---

[51] Despite its lack of evident similarities in melodic development (although *c* is both initial and finalis there is no upward leap and the range is only *B𝄳* - *f*, the whole being tentatively analysable as, if anything, of the form p + p (*c* - *e*) + r). What makes the identification of this passage as çargâh probable is the fact that H3b follows with a nearly identical repeat a step lower which cannot be identified as anything but segâh.


296
280 H1
M
H2a
L
A
1
2


H2b
H3a
b
284 H1
Ma
h
Z
H2a
H3a
+A
+B
B
C
+C
D
+D
modulation
+
1.
2.

Example 27

The first two of these suggest not modulation but repetition at the octave (in Ma) and transposition (in H2b and c),[52] while in H3 modulation is difficult to define.[53] In 280, on the other hand, H2 as well as H3 is interpretable as a more integrated extension into the territory of 33. şehnaz, even if the use of finalis *f♯* in both subsections of H2 runs counter to any clear identification with that mode.[54]

Given the dimensions of the two complete pieces, strict adherence to the vertical alignment of repeated material would result in an over-long display. To avoid this, repetitions of the material around *f♯*, whether literal or varied, have been juxtaposed horizontally in ex. 27 (and in subsequent discussions similar problems will be approached in similar ways.) Omitted is the modulatory and/or transposed material in 284. The rhythmic cycle of 280 is sakil, that of 284 the much less common semai [-i lenk], in which melodic symmetry suggests that the internally prominent node should be time unit 6, and it has been so marked in ex. 27.

As this shows, the general similarity between the initial statements of the modal material in 280 and 284 is striking: both start in H1 with the descending cell *f♯ e d*, and begin M with a rising fourth from *f♯* followed by a stepwise descent back to it. But of rather more interest than pursuing further obvious parallels is to remark on the differences in complexity: in H1 284 presents ever more elaborate versions of the *f♯ - B𝄳* descent, while 280 contents itself with little more than an unadorned presentation of the modal essentials. In M, on the other hand, the brief opening expansion into the upper register is followed in 284 by repetition of earlier material and, after a modulation, by fairly simple amplifications of the *f♯ e d* area, after which we have an unadorned *f♯* → *B𝄳* descent and a second repetition of the cadence, whereas in 280 it is followed by a vast development stretching over four whole cycles (192 time units) during the course of which various elements are brought to the fore. Noticeable in the way these are organized is the importance of *d* as provider of both a point of entry and an intermediate cadence and, as a result, of the triad (or set of third relationships) *f♯ - d - B𝄳*.

The prominent role of these pitches appears clearly in the display of relative duration. Omitting 296, which consists largely of a cadence formula absent from the other two pieces,

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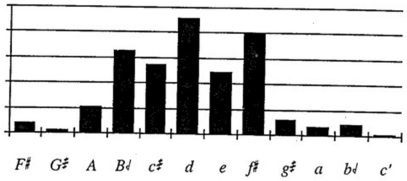
[52] The pitch set in H2b results from an exact transposition up a fourth (*f‡* thus corresponding to *c‡*) of H2a. H2c similarly starts by transposing the beginning of H1 up a fourth, and then continues with an almost exact repetition of Mb part of which, in turn, consists of the same transposition up a fourth of the beginning of H1. There might be a faint hint of an incipient modulation into 23. mahur in Mb, especially given the prominence of *g*, but the cadences fail to establish it.

[53] Although the modal identity of parts of 284 H3 is difficult to pin down, most of it must be regarded as in geveşt: H3a evidently is, while H3b seems as if it might actually incorporate the cadence formula described by Cantemir in the upper octave (*b𝄳 a♯ g a♯ b𝄳*), but then veers away to cadence unexpectedly on *f‡*. H3c may again be regarded as a passage transposed up a fourth, and while H3d begins in an apparently unorthodox way, it later converges.

[54] The pitch set here is a repeat from *e* of what may be termed the hicaz tetrachord (1 2♯ 3 4) already present in geveşt, as manifested in 280, from *A*. This piece also exhibits a parallel extension of the range downwards, for H3 contains a descent to finalis *F♯* employing, in place of the expected *B𝄳 A G F♯* or *B𝄳 A♯ G F♯*, the unusual pitch set *B𝄳 A G‡ F♯* (which suggests an incomplete hicaz tetrachord on *E*). This particular structure occurs nowhere else in the corpus, and is best regarded not as a modulation but as an extension, parallel to that in the upper register, of the *f♯ - B𝄳* core of geveşt.

and subsuming *A♯* under *A*, *G* and *g* under *G‡* and *g‡* respectively, and omitting *b* (a half time unit), we have:[55]



The only passages elsewhere that can be identified with reasonable confidence as modulations into geveşt occur, not unexpectedly, in a piece in segâh, to the modulatory family of which geveşt belongs. The passages in question, 216 Mb and H3b, have initial *d* rather than *f♯*, and there is again no trace of the cadential formula including a descent to *G*.

16. ısfahan

The notations this time conform in H1 and M quite well to Cantemir's description (p. 51), and it is now his own composition, 278, that seems to adhere to it rather more closely than 277, of which 278 is a *naẓīre*, being in the same rhythmic cycle and borrowing its opening three-note motif. Classed as a terkib, ısfahan is said to begin like 31. uzzal (i.e. with the pentachord *A B𝄳 c‡ d e*) and after reaching *f* to descend like uzzal or 30. hicaz to *B𝄳*, then to ascend to *c* and *d♭*, thereby giving a strong impression of 25. saba, and to cadence like saba on *A*.[56] It is worth noting, however, that despite such quite explicit recognition of relationships with these other modes it is not listed among their modulatory families nor, indeed, in that of any other mode.

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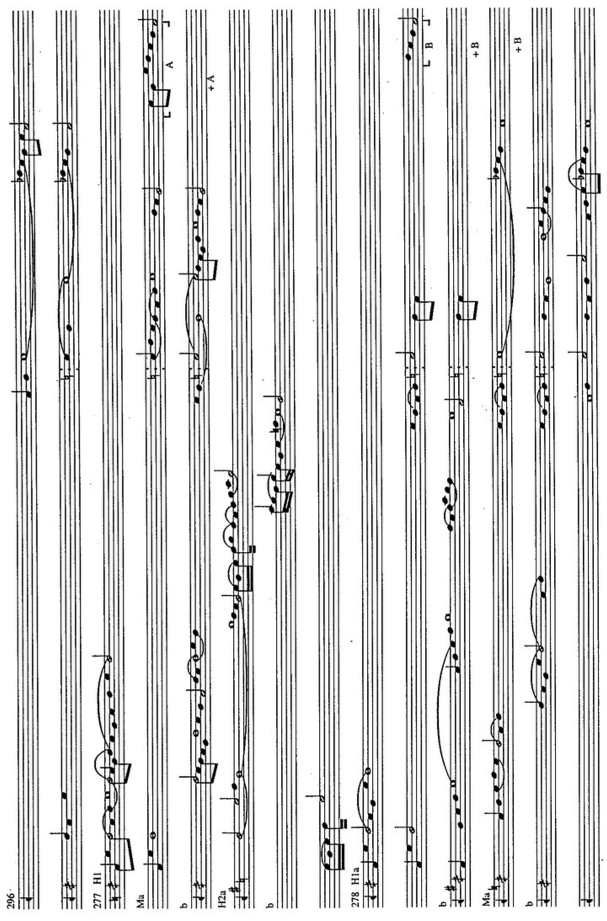
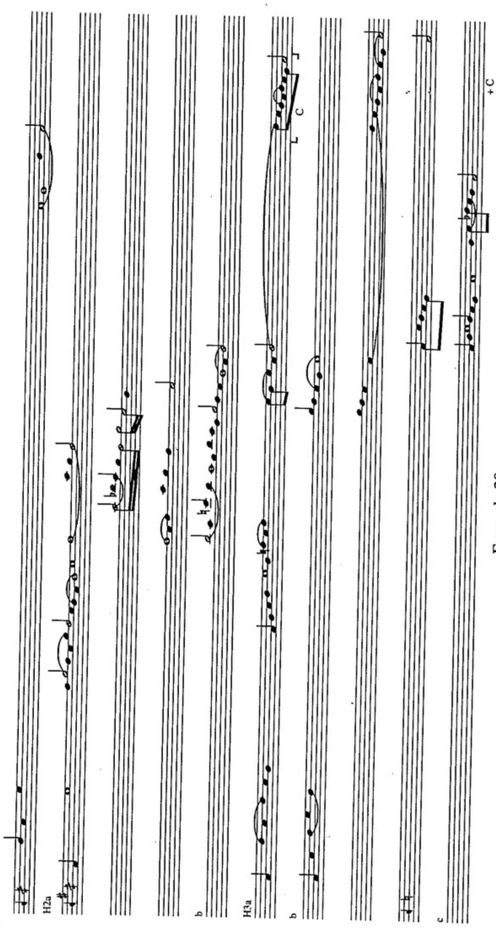
[55] The breakdown for each section is as follows:

		F♯	*G‡*	*A*	*B𝄳*	*c‡*	*d*	*e*	*f♯*	*g‡*	*a*	*b𝄳*	*c'*
280	H1	0	0	0	8	1	17	3	17	1	1	0	0
	M	0	0	7	25.5	30	53	23.75	28.75	7.5	3.5	1.5	0
	H2	0	0	0	1	5.5	8.5	6.5	35	13	9.5	14	3
	H3	17.5	6	16	11	12	7	9.5	13.5	3	0.5	0	0
284	H1	0	0	6	30	19	31	14	20	0	0	0	0
	M	0	0	10	37	21	35	18	33	1	1	4	0
	H2a	0	0	0	0	8	18	30	24	0	0	0	0
	H3a	0	0	6	28	20	26	0	0	0	0	0	0
		17.5	6	45	140.5	116.5	195.5	104.75	171.25	25.5	15.5	19.5	3

[56] اصفهان ترکبی عزّال کبی اغازه ویرر وحسینی پرده سنه کلنجه عجم پرده سنه باصر، آندن عودت ایدوب حسینی نوا وعزّال پرده سنه کلدکدنصکره عزّال یاخود حجاز یوزیندن چارکاه پرده سنی اشوب سکاهه دوشر آندن کنه تیزه چقوب چارکاه پرده سنه وصبا پرده سنه باصوب صبا نغمه سنی بر خوش کوسترر وصبا یوزیندن کلوب دوکاه قرار قلر .





Example 28

Given the apparently greater degree of divergence from Cantemir's account in the form of ısfahan exhibited in 277, it is tempting to assume that the later marginal note attached to it, *eski* ('old') *ısfahan*, should be construed in the more obvious way as applying to the mode rather than the piece (and similarly with the corresponding *yeni* ('new') *ısfahan* note on 278). But although Cantemir's index (p. 124) qualifies 277 in the same way, it contrasts 288 with it by calling it *cedīd*, also meaning new, but an adjective always used of pieces rather than modal variants, and in fact the distance between 277 and the verbal definition given above is narrower than may at first be thought. It may be observed, for example, that although *B* unexpectedly occurs in place of *B*𝄳 in H1 it should be regarded not as belonging to a different pitch set but as a contextually determined higher variant: it is always followed by a note one or two pitches above,[57] whereas in Mb the occurrence of the prescribed *B*𝄳 in similar material may be associated with a continuation on lower pitches. With regard to the shift to saba and the absence from 277 of the *d*♭ specifically mentioned by Cantemir, it has already been pointed out[58] that even if common in what may be diagnosed as the most recent stage of development of saba, *d*♭ is not obligatory in the final cadence area, where the emphasis is on the pitches *c B*𝄳*A*. More important, in any case, is to note the crucial substitution of *c* for *c*𝄲, and the evident emphasis on *c* before the final cadence to *A* which is quite sufficient to underline this particular modal shift. It is true that 277 also fails to include *f* in the basic exposition; but in 278, too, it is *f*♯ that is first established, and the melodic context in which *f* is subsequently introduced suggests that it should be deemed a conditioned variant of *f*♯. Rather than consider 277 deviant it seems, therefore, reasonable to regard *f* as optional, especially as it is also omitted from the exemplification of ısfahan in 296, where the modulatory sequence underlines the same modal relationships: ısfahan follows uzzal and precedes saba. It also closely resembles the latter, to the extent that the only evidence of a separate identity is a brief uzzal-like gesture at the commencement of the second cycle. Given Cantemir's definition, the position of this element seems unorthodox, but it is quite possible that we are faced here with another case of overlap and possible reinterpretation, the saba-like cadence of the first cycle suggesting, despite the clear arrival of the preceding uzzal at finalis *A*, an element of ambiguity, as though it were at the same time the first segment of ısfahan. If so, the second cycle could be analysed simply as a compressed restatement of the same components in their normal order.

277 H3, which combines repetition and modulation, has been disregarded in the representation of ısfahan given in ex. 28,[59] but it seemed preferable to include 278 H3.[60] The rhythmic cycle remel only occurs in these two pieces, but given their lack of unanimity in the rhythmic articulation of the melody identifying the internally prominent nodes within it is not straightforward. It appears that in the first half 277 follows the percussion underlay (suggesting therefore time units 5, 11 and 15), while 278 prefers a more even sequence of units of four or eight time units. The choice of 5, 15 and 25 as the time units to be marked is thus something of a compromise.

Evident from ex. 28 in the first (sub)sections of both 277 and 278 as well as in 296 is the basic bimodal (and binary) structure of the initial exposition of ısfahan. Although the opening gesture of a rising *A* - *e* fifth which 278 borrows from 277 may have been sufficiently characteristic to generate Cantemir's reference to uzzal, it is in fact around *d* that the first phrases revolve, suggesting therefore a rather stronger link with hicaz. In 277 H1 consists of nothing else, so that it is not until Ma that the next stage is reached, the modal switch which involves a descent from *c*, sometimes to *G*, but always finally to *A*. Higher register material, initially the *d* - *g* tetrachord, is only introduced in H2. In 278, on the other hand, this already occurs in H1b, where greater emphasis is accorded *e*, and the distribution of material between H1a and H1b is then repeated in expanded and varied form in M and H2. As in previous cases where H3 is not a modulation, it plays in a freer and more fragmented fashion with material already familiar. It may be noted that although in 278 the switch to saba is made in both sections of H1, it is done, as in 277, without introducing *d*♭, which has to wait until Ma for its first appearance.[61] Also worth remarking is the close resemblance 278 Mb **2** bears to 296.

The following display of relative duration takes account of the bimodal nature of ısfahan, splitting it into two sections (assignment to which is only occasionally arbitrary), the first with *c*𝄲, the second with *c*. *f* is subsumed under *f*♯, *d*♭ under *d* and *b*♭ under *b*𝄳; and *c'* (one time unit) is omitted.[62]

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[57] Exactly the same phenomenon may be observed at the beginning of 220 H3a, where the continuation clearly identifies the mode as ısfahan (before a later overlapping switch to 43. muhalif ırak).

[58] In the discussion of 8. kuçek.

[59] It begins by repeating earlier material (H3a 1 repeats Mb (to time unit 18) and for the remainder repeats H1, while H3a 2 again repeats Mb (to time unit 16), but H3a ends with a cadence on *G* which allows the whole to be reanalyzed as a modulation into 34. nigriz which is then continued in H3b.

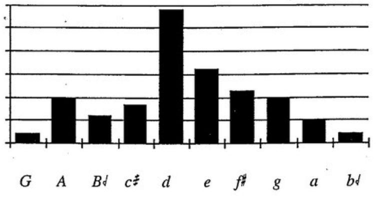
[60] Here, on the other hand, H3a might be thought of as a modulation into uzzal, but the switch to saba is then made in H3b and sustained for part of H3c, so that despite the final cadence reverting to the uzzal pitch set (presumably to link up with the beginning of M) the whole section is best assigned to ısfahan.

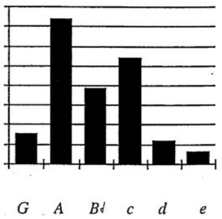
[61] These two pieces are discussed in Feldman, op. cit., pp. 438-40, which also include transcriptions of 277 (but with *B*𝄳 rendered throughout by *B*) and 278 H1 and M (which also appear on p. 241).

[62] The breakdown for each section is as follows:

		G	*A*	*B*𝄳	*c*𝄲	*d*	*e*	*f*♯	*g*	*a*	*b*𝄳
277	H1	0	2	2.5	4.5	14.5	4.5	0	0	0	0
	M	1	4	4	5	12	2	0	0	0	0
	H2	0	0	0	0	11.5	10.5	8	10.5	2.5	0
278	H1	0	5	2	2	7.5	7.5	2.5	3	0.5	0
	M	0	1.5	4	8	19.5	4	1	0	0	0
	H2	0	1	0	1	13.5	12.5	21	16	12	6
	H3	5	17.5	6	5.5	10.5	8	2.5	1	0	0
		6	31	18.5	26	89	49	35	30.5	15	6

		G	*A*	*B*𝄳	*c*	*d*	*e*
277	M	5	13	15	18	3	2
	H2b	1	1	1.5	4	1.5	4
278	H1	0	13	6	5	2	0
	M	5	31	11	21	4	0
	H3	4	13.5	4	4.5	1	0
		15	71.5	37.5	52.5	11.5	6





Taking the two together it could be said that the most salient notes are *d* and the finalis *A*, but the most striking feature is the complementarity between two strongly contrasted parts, the first emphasizing the upper register (characterized by a smooth gradient above *d* with no hint of the third relationships found elsewhere) and with a markedly reduced role assigned to the pitches between *A* and *d*, while the second does precisely the reverse, with the salience of *c* secured at the expense of *d*.

17. nihavent

Cantemir's description (p. 52) is succinct and precise: whether with upward or downward melodic movement nihavent proceeds like kürdi (i.e. uses the secondary notes *B♭* and *f* in place of *B𝄳* and *f♯* respectively) but differs from it in having finalis *G* instead of *A*. The same point is made when discussing 22. kürdi (p. 36): the finalis is *A*, for kürdi proper, or *G*, in which case it is called nihavent, which is a terkib called a makam—abusively so, as Cantemir cannot resist adding, echoing thereby the terminological insistence displayed in the rubric for the final set of his sevenfold classification, to which nihavent belongs: it is defined as consisting of terkibs to which, by commonly accepted error (*ġalaṭ-ı meşhūr*), the term makam is

applied.[63]

The initial definition might suggest relative fluidity of melodic articulation within a given pitch set, but in the event both pieces, 115 and 116, use the same elements in the basic exposition of H1. This consists essentially of a *d* → *G* descent, with optional elaboration of the prominent *d*, mainly involving the pitches below, and optional elaboration of the finalis *G* involving the addition of *F♯* as leading note.[64] M adds further elaboration within the *G* - *d* pentachord, but may preface this with development of the *d* - *a* pentachord, with *a* and *g* prominent, a contour also reflected in the exemplification in 296. In 115 there is no modulation, while in 116 modulation, whether real or apparent, is confined, unusually, to Mb, which introduces *d♭* and in its melodic articulation is akin to 25. saba but differs from it in retaining, and having as finalis, *B♭*. Its pitch set (1 2♭ 3♭ 3) thus coincides with that of 1. hüzzam (*c♯ d e f*). However, there is no melodic similarity, so that rather than think of this passage as a conceivable transposition of hüzzam we may prefer another interpretation: that it is a conscious projection of melodic formulae associated with saba onto the scale of nihavent transposed up a minor third:

A	*B♭*	*c*	*d♭*
= 1	2♭	3♭	3
= *F♯*	*G*	*A*	*B♭*

finalis *B♭* thus corresponding to the normal *G* of nihavent.[65] This subsection, together with Mc, which repeats Ma, will be omitted from the representation in ex. 29. 115 is in the rhythmic cycle düyek and 116 in devr-i kebir, and although there is some evidence here of the newer pattern of internal prominence—116 may well be transitional in this respect—the older one, emphasizing time units 4, 8 and 11, predominates.

As ex. 29 shows, the two pieces diverge in M, but converge again in H2. 116 calls upon a rising scale formula to effect the transition to the upper register, but the development of the *d* - *a* pentachord thereafter, with elaboration of *a* and *g*, is akin to that in 115 H2, if rather more complex. In H3 the strategies again diverge: both, as expected, revert to the lower register, but whereas 115 provides variety by bringing the *A* - *d* tetrachord to the fore (to be followed by a simple rising-falling restatement of the *G* - *d* pentachord garnished only by flexures involving the flanking semitones *F♯* and *e♭*), 116 presents an extended sequence beginning in the core area and descending down as far as *C*, followed by an octave jump to

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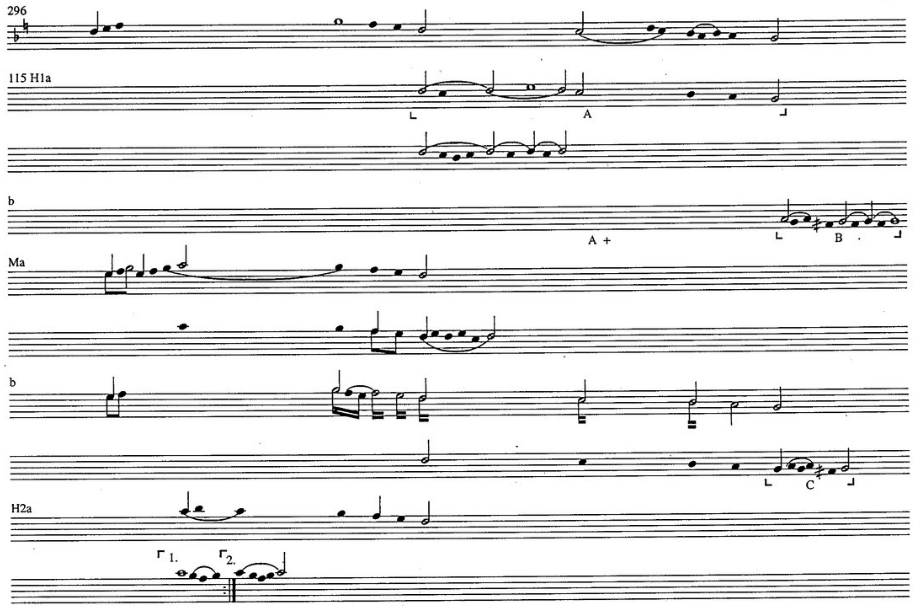
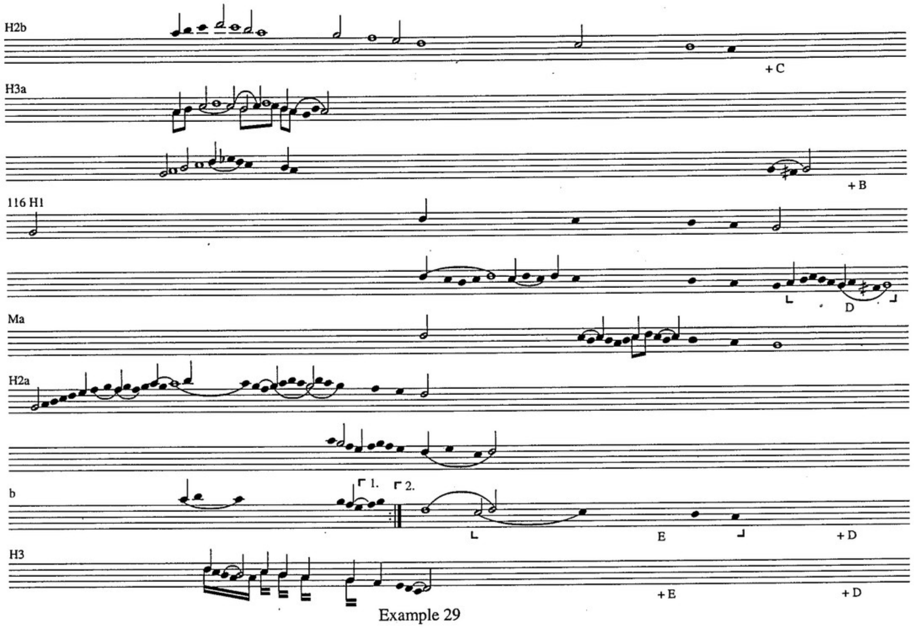
[63] The relevant passages are as follows:

نهاوند كرك نرم كرك تيز پرده لرده كوردى يوزيندن حركت ايدر لكن دوكاه پرده سنده قرار ايتميوب راست پرده سنده قرار قلر.
مقام ايكى قراركاهى وار برى دوكاه پرده سى كه بالذات كوردى مقاميدر، وبري راست پرده سيدر واويله پرده ده قرار قلدوغى زمانده
نهاوند تركبى كه مقام نامى ايله تسمئه اولنمق رحصت بولمشدر اجرا اولنور ، اول اجلدن بر خوش نظر قل كه تركباتك اكسرى بو مقوله
ايكى قراركاه صاحبى اولان مقاملردن پيدا اولنوب مقام نامى ايله ذكر اولنمق غلط مشهوريه در .

[64] In 115 H1 the pattern of internal repetition implied by the a/b division can hardly be judged an improvement on that in the earlier version as recorded by ʻAlī Ufḳī.

[65] Had the finalis been *A* rather than *B♭* one might rather have spoken of an early example, unrecognized in Cantemir's nomenclature, of the modal development that would later be termed saba zemzeme (cf. the discussion below of a similar passage in 265, in kürdi).

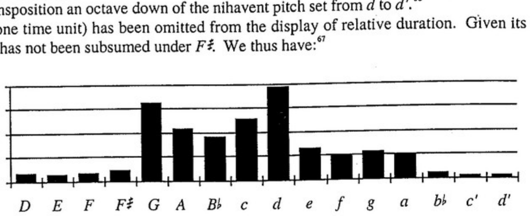

296
115 H1a
A
b
A +
B
Ma
b
C
H2a
1.
2.


H2b
+ C
H3a
+ B
116 H1
D
Ma
H2a
b
1.
2.
E
+ D
H3
+ E
+ D

Example 29

repeat the final cycle of H2b. As this descent uses *F* instead of *F*𝄲 it is tempting to regard it as a transposition an octave down of the nihavent pitch set from *d* to *d'*.[66]

C (one time unit) has been omitted from the display of relative duration. Given its context, *F* has not been subsumed under *F*𝄲. We thus have:[67]



It is no great surprise to see that the notes of the core pentachord *G* - *d* make up no less than 69% of the total, nor that *G* and *d* should be the most salient of all. On the other hand, it might have been expected that some degree of salience would also attach to *B*♭, especially as it is one of the most, if not the most, distinctive element in the pitch set of nihavent, bearing, indeed, the same name; but quite to the contrary there is no trace of triadic character whatsoever, and *B*♭ is the weakest of the five notes. There is nothing unusual, however, about its distribution, so that there is no reason to invoke in justification the possibility that the intonational oddity of this pitch discussed below in relation to cadences in kürdi might also have occurred in nihavent. In the upper register it may be noted that the gradient does not drop completely smoothly, with *g* being marginally more salient than *f*.[68]

18. hisar

Cantemir assigns this mode to the fourth type within his sevenfold categorization, that consisting of descending (*tizden nerme*) makams that use secondary notes. However, according to the nuclear definition (p. 39) the characteristic contour of this mode is provided by the ascent *A c d*𝄲 *e* followed by descent on the same notes to finalis *A*. It is not absolutely certain from this definition that *B*𝄳 is to be omitted, but this does appear to be implied, and it is indeed omitted at the beginning of 163 (while the initial *c* of 296 is preceded by the final *A* of the previous mode). However, other contexts show that although *B*𝄳 may be omitted in ascent it does not have to be, and in descent, even if less prominent than *c* and *A*, it is normally included. The expansion states that ascent from *d*𝄲 (which also bears the name hisar) produces a particular affinity (*ünsiyet*), i.e. consonant relationship, with *g*𝄲, and this note is then listed among those of the descending line, which now includes *B*𝄳: *a g*𝄲 *f*♯ *e d*𝄲 *c B*𝄳 *A*. But hisar is, Cantemir observes, a rare mode with few associated terkibs; accordingly, there are only a very few compositions in it, and among instrumental pieces mention is made specifically of just one peşrev and one semai (even if the two full compositions notated by Cantemir, 162 and 163, are both peşrevs).[69]

162 contains no modulations, and the eponymous *d*𝄲 appears in each (sub)section. 163, on the other hand, seems to consist of little else after Ma, and *d*𝄲 gradually disappears as M progresses. It is omitted from the final descent over the last two cycles of Ma,[70] while Mb goes further and omits *d*𝄲 altogether, so that it could at best be described as of potentially ambiguous modality: the resulting pitch set could also be derived from sipihr; and Mc, the extensive final subsection which will end the piece, begins by repeating the final descent of Ma and then replaces *d*𝄲 with *d* throughout and also *g*𝄲 with *g*. From Cantemir's remark about the relationship between *d*𝄲 and *g*𝄲 it could be argued that the latter was not necessarily constitutive of the modal identity of hisar, but in no other instance is it omitted or replaced, and the end result here is, rather, suggestive of 40. ırak or 43. muhalef ırak.[71] From H2b on, other more specific modulations appear, so that the extent of modulation and the by no means negligible number of modes included appear to place this piece somewhere between an orthodox peşrev and the külliyat genre.

In ex. 30 representation of 163 will only go as far as Mb, Mc being dealt with separately in ex. 31. With regard to the mülâzime of 12, the other substantial item in hisar, there is no one obvious point at which this reverts from hisar to saba, the main mode of the piece, and the bracketed area could be regarded as one of overlap. 162 is in sakil, 163 in düyek, while the rhythmic cycle of 12 is darb-ı fetih, in which (at least some of) the internally prominent nodes may be indentified, if with some hesitation, with time units 9, 17, 25, 33, 41, 49, 57, 65, 73 and 85.

Although more complex, the material displayed in ex. 30 has an overall arch shape that can be viewed as analogous to earlier models where the exposition suggested a ternary structure. There is an optional initial ascent followed by elaboration of *e* (p), then a descent from

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[66] Especially as the modern version transposes this passage up an octave.

[67] The breakdown for each section is as follows:

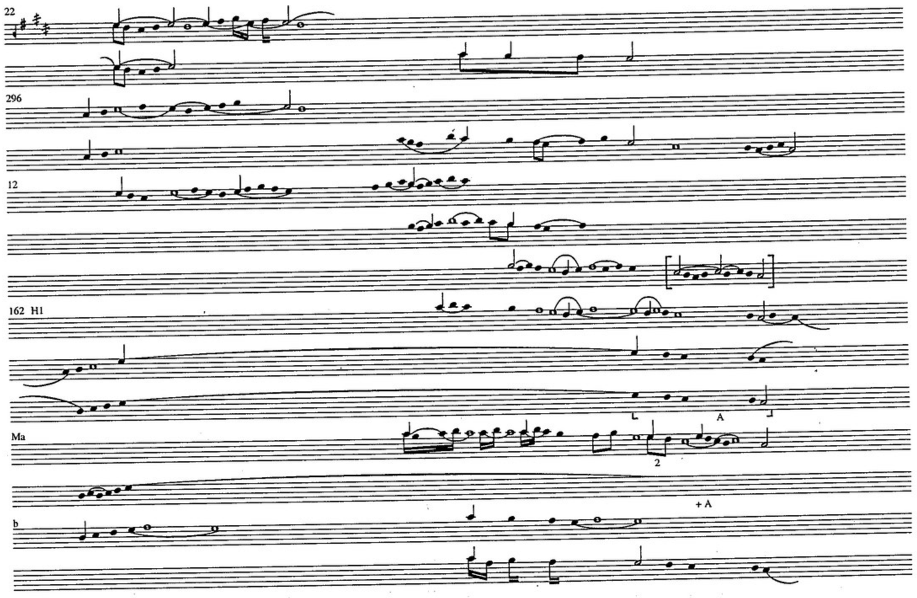
		D	*E*	*F*	*F*𝄲	*G*	*A*	*B*♭	*c*	*d*	*e*	*f*	*g*	*a*	*b*♭	*c'*	*d'*
296		0	0	0	0	4.5	0.75	0.75	4.5	5	1.75	0.75	2	0	0	0	.0
115	H1	0	0	0	3	13	5	3	10	26	4	0	0	0	0	0	0
	M	0	0	0	1	9.5	8.5	5	6	13.5	13.5	11	9	3	0	0	0
	H2	0	0	0	1	5.5	2.5	2	2	9	4	6	8	14	4	3	2
	H3	0	0	0	4	14	14	12	11	8	1	0	0	0	0	0	0
116	H1	0	0	0	0.5	9	2.5	3.5	5.5	7	0	0	0	0	0	0	0
	M	0	0	0	0	4	3	5	8	8	0	0	0	0	0	0	0
	H2	0	0	0	0.5	3	2.5	2	4.5	9	4.5	5	6	4	1	0	0
	H3	7	6.5	7	0.5	10	9.5	7	5	2.5	0	0	0	0	0	0	0
		7	6.5	7	10.5	72.5	48.25	40.25	56.5	86	28.75	22.75	25	21	5	3	2

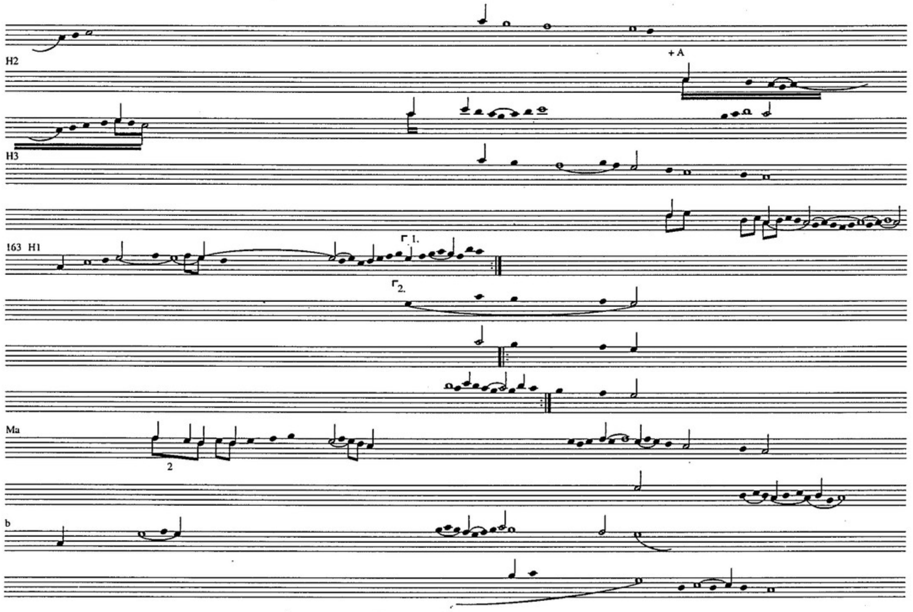
[68] In 296, nihavent is preceded by acem, and it may be that there *g* is made initially more salient as a means of differentiation.

[69] These two are listed in the first and second indexes (p. 121 and 126), but in the third (p. 141) we find in place of 162 a peşrev in muhammes, while in the margin mention is made of not one but two semais.

[70] Although one may note a parallel omission in the descent of 296, which can hardly be thought to be straying from hisar.

[71] *d*𝄲 does make one of two fleeting appearances later, especially at the cadences of H2a, b and c and H3c, all of which are medial on *e*, but it would be difficult to discern here a return to hisar: the material is typical of 51. muhayyer or the upper register of 58. hüseyni.



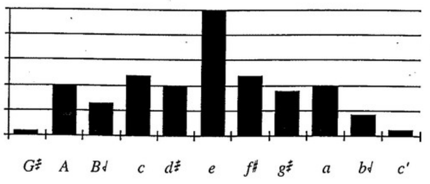


Example 30

a (with optional elaboration) to *e* (q).[72] In 22 and 163 H1 *e* is the finalis, but elsewhere there is a further descent from *e* or *c* to finalis *A* (r). 162 departs from this pattern to the extent that both H1 and M begin with q, but thereafter H2 is normal in developing the higher register, as is H3 in its more fragmentary structure, which also contains a brief exploration of the register below *A*. 163 begins with an apparently more conventional order of events, but then departs from the relatively compressed forms of exposition hitherto encountered in H1, developing the upper register as far as *c'* and then failing to descend below *e*. Ma, however, provides a counterbalance, for it begins with p and then moves immediately to r.

In addition to the changes in pitch set, the modal physiognomy of 163 Mc and H2a presents a pattern quite different from the above. Both are characterized by multiple internal repetitions, Mc being centred upon the *A* - *e* pentachord and H2a on the upper register from *e* to *c'*, as is apparent from ex. 31.

163 Mc and H2a have been excluded from the display of relative duration, but the bracketed material in 12 has been included. *F♯* (one time unit) is omitted, so that we have:[73]



This underlines the already evident salience of *e* and suggests, in contrast to 17. nihavent, a triadic hierarchy, with *A c e* and *a* each more salient than the notes between them. But there is at the same time a similarity between the two modes, even if of a negative order: in both

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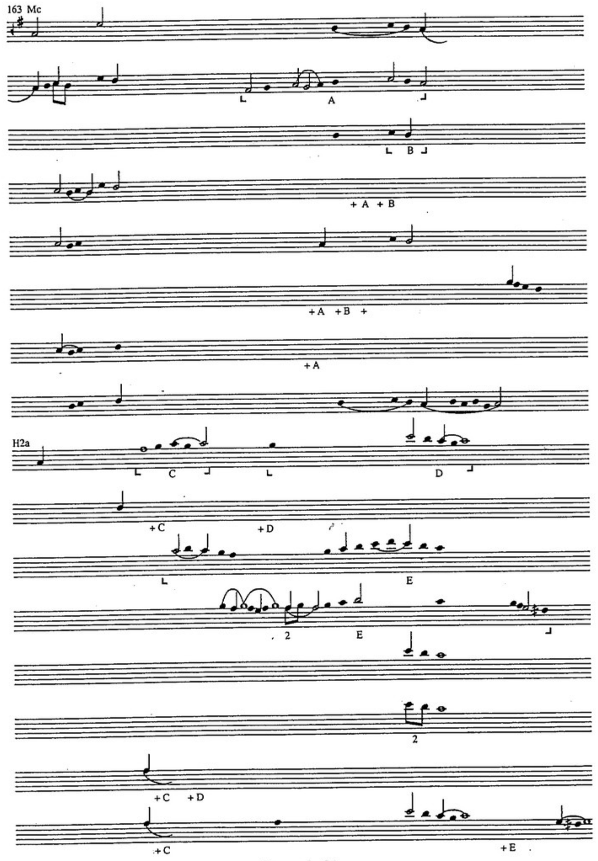
[72] There is usually a jump from p to q, but 12, especially, develops the *e* - *a* tetrachord, thereby producing a more complex ascending and descending arch form.

[73] The breakdown for the individual sections is as follows:

		G♯	*A*	*B♭*	*c*	*d♯*	*e*	*f♯*	*g♯*	*a*	*b♭*	*c'*
12		0	3	4	8	3	14	14	12	7	5	0
22		0	0	0	2	11	18	4	3	2	0	0
296		0	4.75	0.75	5.5	3.25	9.75	2.75	1.75	1	0.5	0
162	H1	0	8	6	9	6	11	4	1	2	1	0
	M	0	12	8	16	10	20	10	7.5	11	1.5	0
	H2	1	2	2	6	3	3	2	4	13	7	5
	H3	4	15	8	6	3	5	3	2	1	0	0
163	H1	0	2	0	6	8	34	14	12	17	9	2
	M	1	10	8	9	9	26	14	7	4	0	0
		6	56.75	36.75	67.5	56.25	140.75	67.75	50.25	58	24	7



Example 31

cases the eponymous note, presumably considered characteristic, is less salient than those flanking it. It thus appears in these two cases that what was important was not that any particular emphasis should be placed on the pitches which had the same name as the makam but that the pitch in question was a secondary note that replaced a main note and thus constituted a significant deviation from the norm.

A further four modes occur as the main mode of three pieces each: hicaz, arazbar, baba tahir[74] and nişabur. One of the pieces stated by Cantemir to be in arazbar is, however, assigned by 'Alī Ufḳī to acem, and another to hüseyni; and as a further complication Cantemir claims that arazbar and baba tahir form a group with gerdaniye within which discriminations are difficult to made. His collection contains no example of gerdaniye, but to judge by his description (pp. 33-4) the third example of arazbar would certainly seem to bear a more than passing affinity to it. To confuse matters even more, two of the three examples of baba tahir are akin to the arazbar piece assigned by 'Alī Ufḳī to hüseyni; the third, on the other hand, suggests a relationship with sünbüle; and all three bear a strong initial resemblance to muhayyer. Arazbar and baba tahir will, accordingly, be held back for later consideration. Likewise, hicaz forms part of a group best considered together, its closest relatives among them being uzzal and şehnaz. There remains to be examined here, therefore, only nişabur.

19. nişabur

The following pieces are in this mode:

119, 160, 228

and it is also exemplified in 296.

For Cantemir nişabur is a compound (*mürekkeb*) makam, belonging therefore to the fifth of his seven categories. These are preceded by a binary contrast (cf. 1.3.3) drawn between compound and simple (*müfred*) makams, the latter evidently conceived of as primary, non-derived entities, and the compound category is indeed later defined (pp. 41-2) as consisting of those modes which have neither a distinctive beginning nor an individual finalis but take these (by implication already pre-existing) elements from other modes and, in some cases, take medial elements from yet further modes as well.[75] But the features referred to in the nuclear description of nişabur (p. 45) relate not so much to the inclusion of elements exising in other modes as to the inclusion of particular secondary notes, albeit notes bearing the same names as, and hence considered characteristic of, particular modes, in this case *f* (acem), *c*♯ (uzzal) and *B* (buselik). Initial and finalis are not defined, although the latter is referred to negatively in a concluding and somewhat elliptical remark to the effect that as it is not shared with any other mode there is no affinity (*ünsiyet*) between nişabur and the three modes named by these three notes.[76] The following expansion, however, defines an initial ascent beginning from *B* (*B c*♯ *d e f*), refers to melodic development of the upper register as in 21. sünbüle, and then specifies a descent on the same notes to finalis *B*.

The notations accord closely with this analysis, except that initial *B* appears only in 296 and that in the upper register emphasis on *a*, where it occurs, is accompanied in only one case by *b*♭, the inclusion of which could reasonably be thought to be implied by Cantemir's reference to sünbüle, even if it is not there, strictly speaking, obligatory. They also accord with Cantemir's views on the lack of affinity between nişabur and the three modes each of which shares one of its secondary notes (and, consequently, raise doubts about the appropriateness of its membership of the compound category).[77] More generally, they may be cited in support of the alleged paucity of modulatory possibilities in modes which, like nişabur, have a unique finalis, for in all three pieces the only section which could be thought of as modulatory is 160 H2, and it is precisely here that the register above *a* is explored and, towards the end, *b*♭ introduced, so that it exemplifies the excursion into sünbüle which, for Cantemir, is a normal part of nişabur (and could therefore be adduced in support of its inclusion in the compound category).

However typical, 160 H2 is thus at the same time representative of another mode and may, for immediate analytical purposes, be omitted from the representation of nişabur in ex. 32. All three pieces are in rhythmic cycles previously encountered, so that nothing needs to be added about the positioning of prominent nodes.

In two of the three the exposition in H1 can be regarded as essentially binary, consisting of elaboration of *d* (p) followed by a jump to *a* and a descent to *d*, which may again be elaborated (q). To this basic scheme 228 H1a adds an initial ascent from *G*, which is no more than a formulaic mechanism for arriving at, and giving prominence to, *d*, and a two-note descent to finalis *B* which may reasonably regarded as a third element (r), for it also provides the conclusion of M in the other two pieces and the conclusion of 296. In the remaining subsections of 228 H1 and each subsection of M in 119 and 160 there tends to be omission of either p or q and more complex development of the other: indeed, q is absent from all of 119 M, but then provides virtually the whole of H2, as it also does in 228.

In three cases, 119 Mb and H3 and 160 Mb, the initial elaboration of *d* ends in a descent to *A* and a return to *d* effected by a leap, so that it is tempting to think of a possible inverse (and reverse) symmetry in the second stage of development:

1. $d \longrightarrow a \dashrightarrow d$

2. $d \dashrightarrow A \longrightarrow d$

Given that what was for Cantemir a standard modulatory excursion into sünbüle is only opted for in 160, problems of contrast arise in H3 of 119 and 228. The former provides variety by concentrating on an area hitherto ignored, the gap between p and q, filling in and

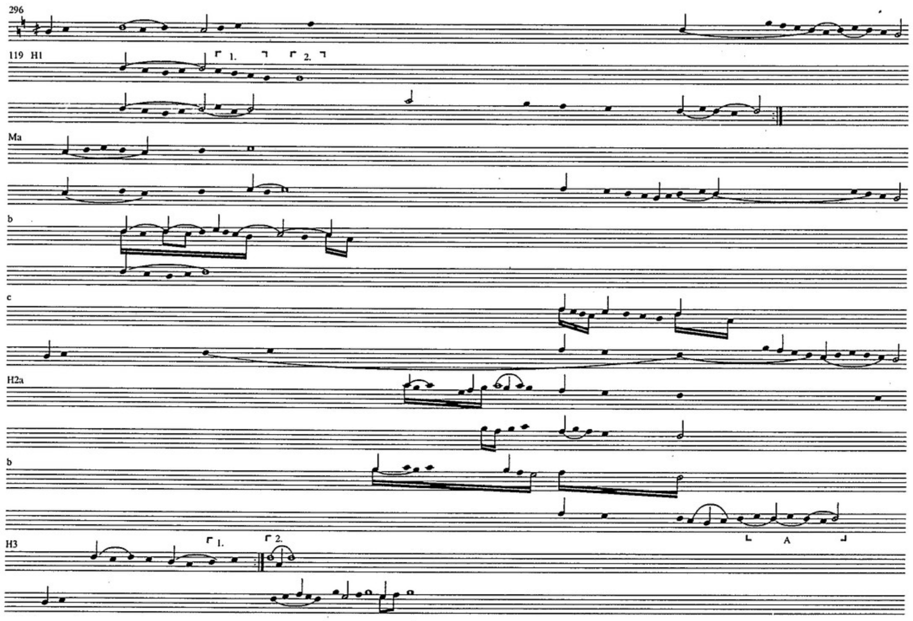
---

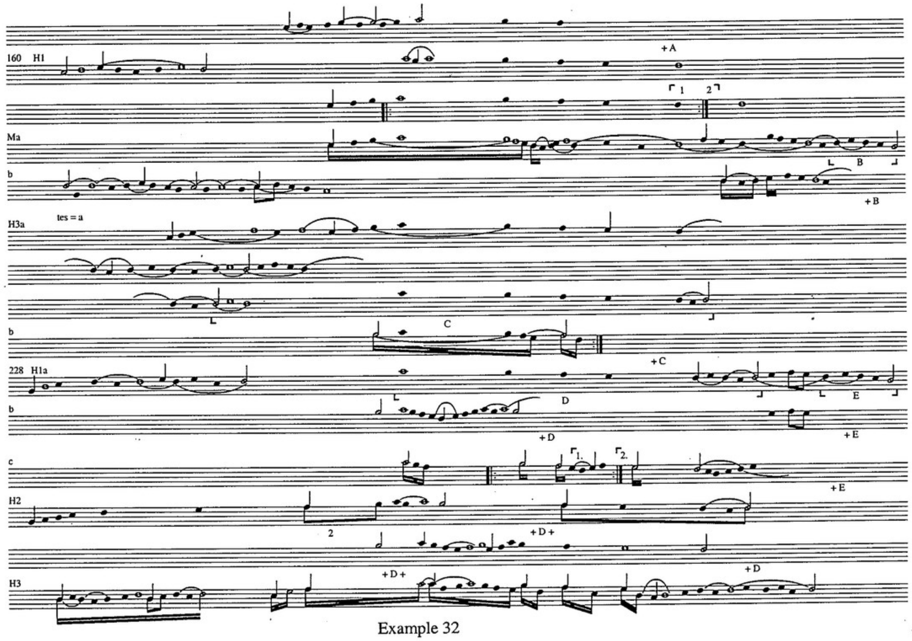
[74] In one case, 240, called just tahir.

[75] بو مقاملرك بالذات نه حرکت اغازه لری نه قرار استراحتلری واردر، لکن بر مقام ایله حرکت اغازه ایدوب سائر مقام ایله قرار قلرلر وبعضیسی اره پرده بر یاخود ایکه مقام پرده لرك تراکبنی قارشندروب / بر قچ مقامك بر قچ تراکبندن بر مرکّب مقام پیدا ایدرلر، اویله که نه حرکت ایتدوکی نه قرار قلدوغی مقامی بالذات اجرا ایدرلر.

[76] مرکّب مقام نشابور مقامی اوج نیم پرده لردن پیدا اولنور، یعنی عجم، عزّال، وبوسلك پرده لریندن وقرارکاهی هیچ بر مقامه بکزمدوکی سببی ایله ذکر اولنان پرده لرك مقاملری ایله بر وجهیله انسیّت ایتمز.

[77] Cf. Feldman, op. cit., pp. 229, 246.

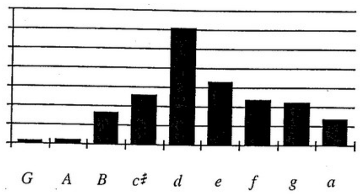

296
119 H1
1.
2.
Ma
b
c
H2a
b
A
H3
1.
2.


160 H1
+A
1
2
Ma
B
b
+B
H3a
tes = a
C
b
+C
228 H1a
E
D
b
+D
+E
c
1.
2.
+E
H2
2
+D+
+D+
H3
+D

Example 32

elaborating the ascent from *d* to *a*; and the latter covers the same ground in the context of a vast sequential arch with three rising and three falling members before a final elaboration of *d*.

The display of relative duration is:[78]



Rather more interesting than the simple if overwhelming emphasis this places on *d*, which merely quantifies a pivotal importance already made manifest in ex. 32, is the contrast it provides with the corresponding figures for 17. nihavent, where, taking finalis *G* as equivalent to the prominent *d* in nişabur, exactly the same sequence of intervals occurs. We thus have:

nişabur	%	12.9	30.6	16.6	12	11.2	6.7
		c♯	*d*	*e*	*f*	*g*	*a*
		= 7♯	1	2	3♭	4	5
		= *F♯*	*g*	*a*	*b♭*	*c*	*d*
nihavent	%	2.3	16.7	10.6	8.9	13.2	19.7

Given the wider range of nihavent it is inevitable both that the overall average will be lower and that the top note of this segment, *d*, which is not, like the *a* in nişabur, the highest note

used, will have relatively greater salience. But the differences still transcend these predictable variations, demonstrating that despite general similarities of contour between the two modes (elaboration of 5, descent, elaboration of 1), bias may vary considerably even when the same intervals are used. At a more abstract level, that of the gamut as a whole, it may be observed that *d* is central (being the exact mid-point of the total *C* - *e'* two octaves and a third range), and given that the great majority of modes have *A* or *G* as finalis it is only to be expected that the most heavily used area will be that below *d* or, more generously, that between *G* and *g*. Viewed in this perspective it is rather less surprising to find, in contrast to nihavent, with its orthodox register and hence fairly even spread of prominence over the core pentacord, that within the unusually highly placed corresponding pentachord in nişabur it is the lowest note that is much the most salient.[79]

2.2.4 *Modes 4*

We now move on to makams represented by four or more pieces, and with the increase in the amount of material to be examined the need arises to consider certain forms of abbreviation in order to keep presentation within reasonable limits. To the original conventions (2.1.1) the following will be therefore be added:

> 6. Omission of the simplest forms of elaboration, those employing immediately adjacent pitches (except for: cadences, where it is useful to retain certain distinctions; passages introducing a change in the pitch set and hence, possibly, in the modal constituents; and prominent notes, which not normally be omitted). The following reductions may thus be made:
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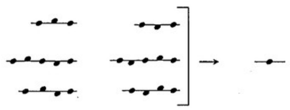
> 
>
> and similarly with the first two notes in e.g.:
>
>
>
> The duration of the area affected by the reduction will be summed and represented accordingly: where it consists of eight or more time units a square void note head will be used.
>
> 7. Reduction of rhythmically regular scale passages to a line drawn between the lowest and highest pitches.

---

[78] The breakdown for the individual sections is as follows:

		G	*A*	*B*	*c♯*	*d*	*e*	*f*	*g*	*a*
296		0	0	5.5	4	6.5	2	1.5	0.5	0
119	H1	2.5	0.5	4.5	9.5	27	4	2	2	4
	M	0	2	18	23	23	14.5	2.5	1	0
	H2	0	0	1	4	15.5	9	9	10	7.5
	H3	0	3	4	6	14.5	10	6	10.5	2
160	H1	0	0	0	7	15	9	4	5	8
	M	1	2	16	23	40.5	24.5	21	12	4
	H3	0	0	0	6	29	19	21	16	5
228	H1	1	0	15	11	48	26	16	16	11
	H2	1	1	1	6	32	15	12.5	17	10.5
	H3	0	2	9	16	23	16	12	10	8
		5.5	10.5	74	115.5	274	149	107.5	100	60

[79] Feldman, op. cit., 248, suggests that nişabur might be an expanded version of hüzzam, but the argument adduced is unconvincing, and there is little in the notations to support such a view.

8. In most cases, omission of H3. (It has been seen that when H3 is not a modulation it normally consists either of a fragmentary reworking of elements presented in previous sections or of highly formulaic passages largely made up of scales and sequences. In neither case does it shed fresh light on the structure of the mode, except in so far as it may illustrate which segments are perceived as detachable and which reorderings are acceptable. Where appropriate, such insights can be added in the commentary.)

20. nühüft

The following pieces are in this mode:

215, 230, 266, 342

and it is also exemplified in 296.

For Cantemir (p. 53) nühüft is a terkib of which there is no agreed form. Indeed, he begins his account by stressing the current lack of unanimity,[80] and goes on to quote various authorities and their respective versions, starting with ancient sources (*edvār-ı ḳadīm*) according to which it begins from *a*, proceeds like 16. ısfahan and ends like 30. hicaz on *A*. He next mentions the vocalists Receb and Buḫūrcızāde (later Buḫūrcıoğlu),[81] for whom it begins from *d* and uses main notes in descending to finalis *E*; followed by the instrumentalists Neyzen ʻAlī Hoca and Tanburi Meḥmed Çelebi, in whose version it again begins from *d* but, more specifically, proceeds like 49. rehavi to emphasize *G* before descending with main notes to finalis *E*. The last authorities to be cited are again instrumentalists, the two tanbur players Koca Angeli and Çelebi, who define it as beginning from *d*, proceeding via *B* to *A* and descending thence with main notes to final *E*. For Cantemir the correct version is, hardly surprisingly, that of an instrumentalist, but rather than the expected Angeli, his own teacher, it is ʻAlī Hoca whose definition is preferred, on the grounds that it supplies adequate differentiation. (That of the vocalists is equated with neva-yi aşiran, while that of Angeli is said to be in no way differentiated from 28. buselik aşirani.)

A cursory glance at the examples of notation suggests that this is, indeed, an appropriate conclusion. But it also suggests that a more comprehensive description might have included both the reference in the ancient authorities to ısfahan, typical elements of which appear prominently in all but one piece, and the reference to *B* made by Angeli and Çelebi, for in the light of this it can hardly be fortuitous that 215 H2b (and H3b) begin in 27. buselik. It may be assumed that these are normal parts of the complex of possibilities that constitutes nühüft,

---

[80] The account (translated in full in Feldman, op. cit., 243) begins:

اهل موسيقار ما بينده نهفت تركبى ايچون چوق مجادله واردر.

The following discussion in Feldman includes transcriptions of 215 H1 and 230 H1.

[81] As a composer Receb appears prominently in the song text collection of Ḥāfıẓ Post. Buḫūrcızāde/Buḫūrcıoğlu is ʻIṭrī, composer of (the fragmentary) 342.

and likewise that 266 H2 is not a modulation.[82] Three of the four pieces are in cycles (or a compound of cycles) already encountered, while the fourth, 266, is a semai, and therefore in the six time-unit semai cycle where both the pattern of percussions and the rhythmic organization of the melody indicate that if any internal time unit is be considered prominent, then the obvious candidate is 4, and it will be so indicated in ex. 33. 266 H2 and 230 H2 have been placed, albeit somewhat unconvincingly, in what appears to be the least awkward position available.

As ex. 33 reveals, nühüft may be regarded as a compound (although not so classified by Cantemir) and, indeed, one of some complexity, the various possible episodes of which can be summarized as follows:

P p	(ascent to and) elaboration of *d* (± higher register up to *g* or *a*)
pı	(ascent to and) elaboration of *d* containing *c*𝄲 (± higher register up to *g* or *a*)—an ısfahan element
Q q	descent *d c B*𝄳 *(A G F*♯ *G) A*
q*b*	descent *e d c B (A G*𝄲*) A*—the buselik element
q*r*	descent *((d) c) B*𝄳 *A G*—the rehavi element
qı	descent *c d*♭ *c B*𝄳 *A (G)*—an ısfahan (also saba) element
Rr$_1$	pre-final descent: *A B*♭ *A G*
r$_2$	final descent: *F*♯ *E*

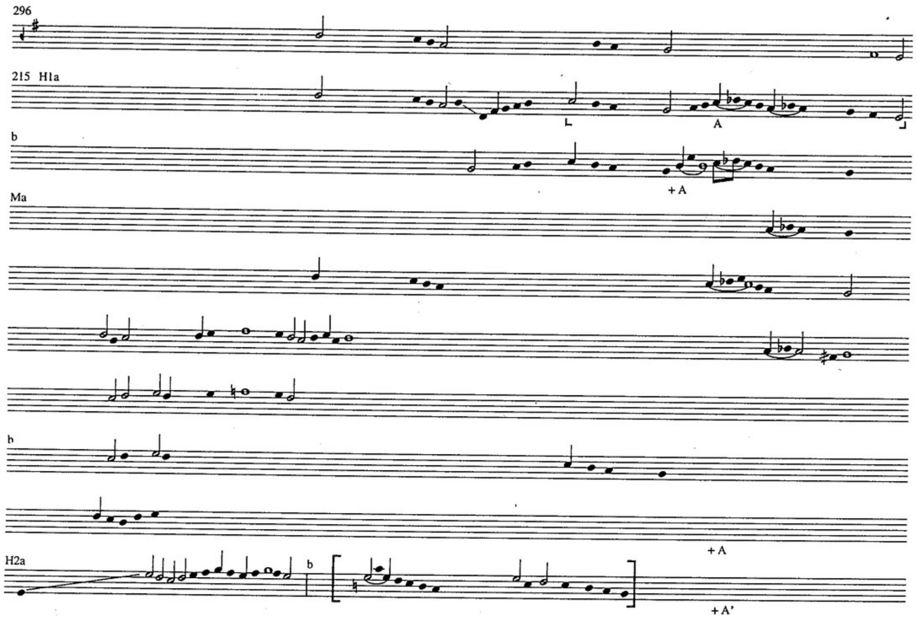
Of these, the indispensible segments appear to be just q, q*r* and r$_2$ (precisely those used in the basic exposition of 296) and, however important, it would be possible to integrate p into q if viewed as an elaboration of the initial note thereof. (It may be observed that despite being the most extended piece 215 does not introducing p until half way through Ma.) Three pieces contain hints of ısfahan, but with the two elements pı and qı occurring in complementary distribution: 230 and 342 contain pı but not qı, 215 qı but not pı. r$_1$ occurs 11 times in all, but appears only in 215 and 266.[83] Excepting single or paired internal repetitions (e.g. p p, p q p q) the above order of events, whether continuous or gapped, is adhered to in every (sub)section apart from 215 Ma (r$_1$ q qı p r$_1$ p). In 215 H2b provides variety through the inclusion and repetition of q*b*, while in 230 H2 consists of pı and p, and 266 H2 predominantly of p. Given its fragmentary state little can be said of 342 except that it conforms to the very brief and general outline definition attributed by Cantemir to its composer, ʻIṭrī.

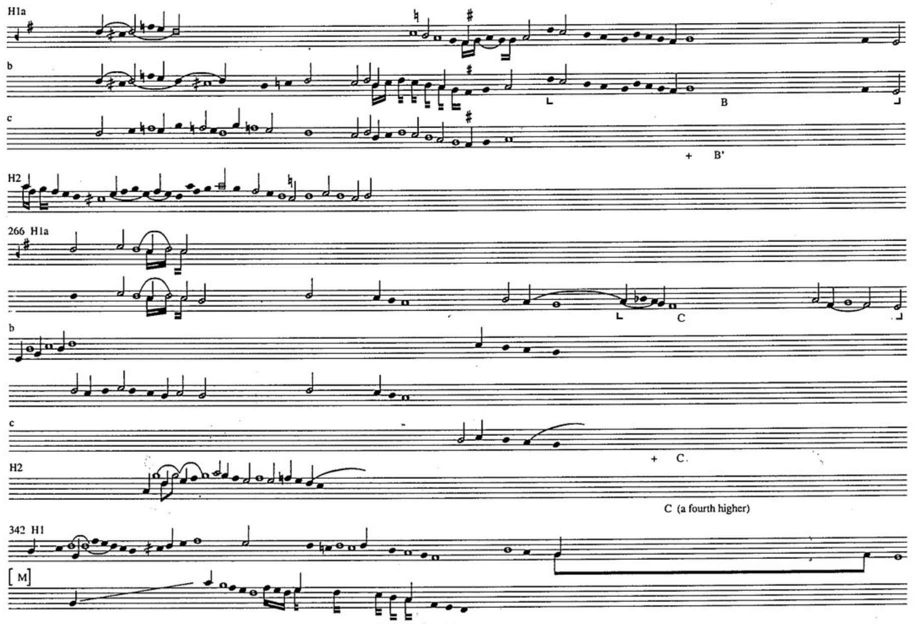
In the display of relative duration *F*𝄲 is subsumed under *F*♯, *f* under *f*♯, *B* under *B*𝄳 and *G*𝄲 under *G*. On the other hand, given their modal significance, *c*𝄲, *d*♭ (and, if with less justification, *B*♭) are entered separately from *c*, *d* and *B*𝄳 respectively. *b*𝄳 (two time units) and *D*

---

[82] The presence of *e*♭ results from the conclusion of this section being a transposition up a fourth of the conclusion of H1a, and therefore does not signal a modulation into beyati.

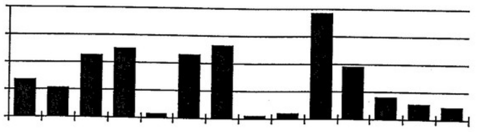
[83] Had it been only 215 it might have been considered no more than a reflex of qı, but qı is absent from 266.


296
215 H1a
A
b
+ A
Ma
b
H2a
b
+ A
+ A'


H1a
b
B
c
+ B'
H2
266 H1a
C
b
c
+ C
H2
C (a fourth higher)
342 H1
[M]

Example 33

(three time units) are omitted. We thus have:[84]



This shows a generally even pattern of salience over the core *G* - *d* pentachord (hardly surprising in view of the emphasis successively placed in the various episodes on *d*, *c*, *A* and *G*) with the exception of *d*, the higher figure here relating to the initial elaboration to which it is frequently subjected.

If the above analysis is correct, the only subsection which can not be justified as a legitimate part of this complex mode is 215 H3a, a modulation into the 30. hicaz/32. zengüle area.

21. sünbüle

The following pieces are in this mode:

40, 41, 97, 258, 259

and it is also exemplified in 296.

For Cantemir (p.41) sünbüle is a compound (*mürekkeb*) makam.[85] It is yet another instance of a mode having a name which also relates to a note deemed characteristic of it, in this case *b♭* and, indeed, it is as the 'owner' (*ṣāḥib*) of *b♭* that he begins his description (p. 42). But he immediately goes on to say that it contains three secondary notes and is a compound of three modes. The first secondary note is the eponymous *b♭*, the second *f* (acem), and the third *d♭* (saba). But while 35. acem and 25. saba are also the second and third of the modes of which it is compounded, the first, which evidently cannot be sünbüle itself, is stated to be 51. muhayyer. Thus far the nuclear description. The following expansion provides an account of melodic movement in which the initial is defined as *a*, followed by development of the upper register on main notes up as far as *e'*. The subsequent descent to *g* may use either *b♭* or *b𝄳*, continues with *f* and *e* and then proceeds, like 8. kuçek, to omit *d*,

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[84] The breakdown will here, and generally below, be given as an aggregated figure for each piece rather than for the individual sections (from which H3 will in any case normally be discarded):

	E	*F♯*	*G*	*A*	*B♭*	*B𝄳*	*c*	*d♭*	*c‡*	*d*	*e*	*f♯*	*g*	*a*
296	4.5	1.5	3.5	3	0	1.5	2.5	0	0	3	0.5	0	0	0
215	21.5	7.5	29	33.5	3.5	22	41	4	0	33.5	29.5	7.5	4	2.5
230	15	13	30	28.5	0	23.5	24	0	7	68	25.5	16.5	7	11
266	10	15	24	31	3	38	31.5	0	0	34.5	13.5	3	9.5	3
342	3	5	6	6.5	0	8	8.5	0	1.5	20	8	6	2.5	1
	54	42	92.5	102.5	6.5	93	107.5	4	8.5	157	77	33	23	17.5

[85] For his definition of this category see 19. nişabur.

ending with the movement *c d♭ c B𝄳 A*.[86]

As might be expected, these various components do not all appear in all five pieces, but the majority do in most, and it is clear that in this case Cantemir has provided an accurate catalogue of distinguishing features. That this is so is demonstrated already by the brief exposition in 296, which begins with a turn including *b♭*, continues with a descent omitting *d*, and ends with a cadence which is reminiscent of saba, even if without *d♭*. All the components appear in 40 (a large-scale composition which also includes something not mentioned by Cantemir, a fairly liberal use of *f♯* in ascent) and 41 is likewise comprehensive, even if some elements appear only fleetingly. But 97 omits *b♭*, and even if according to a literal reading of Cantemir's text it cannot be claimed that the inclusion of this note is obligatory, its absence, given its name, still seems curious, especially when all the other features are present. In descent *f* is again matched by *f♯* in ascent, and the same alternation occurs in 258. This begins by including *d*, thus avoiding the *e* - *c* jump, but this does appear later, and a switch is soon made from *d* to *d♭* (in ascent as well as descent). Indeed, a pattern of alternation, even if by no means rigid, is readily apparent in all four pieces.[87]

Omission of *b♭* also occurs in the final piece, 259, but is here less curious as the other diagnostic features are absent too: what is surprising, rather, is to find this piece classified as sünbüle at all (hence the suggestion in the annotations to Part i that it should be assigned to muhayyer). It has been omitted from the analytical conspectus of material in ex. 34, as have, as usual, the various (sub)sections identifiable as modulations.[88] 97 is in a rhythmic cycle not yet encountered, çenber, which consists of 12 time units, and comparison with other examples suggests that, contrary to the implications of the pattern of percussions, the melodically prominent nodes are at time units 5 and 9. The reduction of areas of elaboration has not been applied rigorously, exception being made, to retain visibility, for the *b♭* in the environment of the initial prolonged *a*. A certain lack of rigour has also been allowed in the representation of repetition, certain minimal variations being disregarded, and likewise in the representation of scales by a line, which is now also used for those in which there is a slight deviation from complete regularity occasioned by the particular configuration of the rhythmic cycle in question.

As ex. 34 shows, the modal features specific to sünbüle accord well with Cantemir's outline, and may be summarized as: in the first area of elaboration the melody always rises

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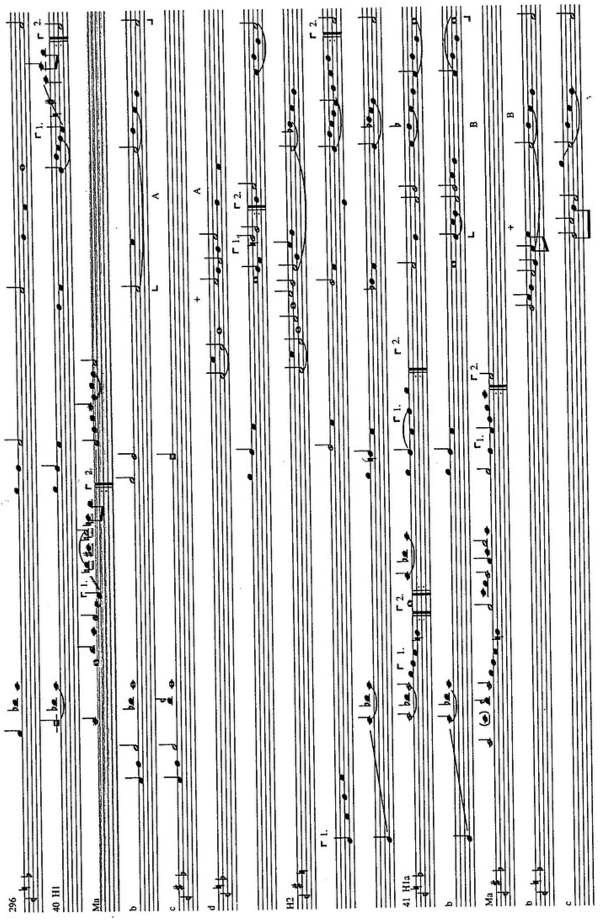
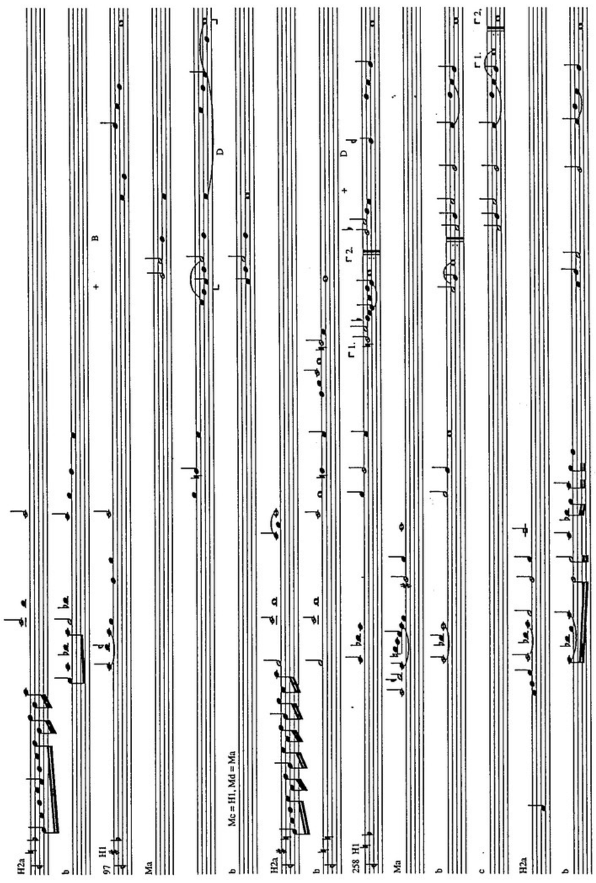
[86] There is a following sentence to the effect that sünbüle is the only makam the tessitura of which is so high (*bülend āvāz*) that pieces in it are beyond the range of singers with low-register (*şāh manṣūr*) voices (these last two terms are usually associated with two of the lower-pitched members of the ney family):

بلکلکی سنبله مقامندن بلند آواز مقام یوقدر اویله که شاه منصور پرده سنده خواننده لر بو مقامده تصنیف اولنان نسنه لری دکمه حال ایله اوقویه بلورلر.

[87] In 40 *d♭* predominates in H1, M and H3, *d* in H2; only *f* appears in Ma, b and d, only *f♯* in Mc; only *b𝄳* appears in Ma and c, only *b♭* in Mb and H2; in 41 *b𝄳* and *b♭* are similarly segregated, while *f♯* is restricted to Ma (where *f* is absent); 97 has *f♯* in ascent, *f* in descent; and in 258 *f* and *b♭* in H1 are replaced by *f♯* and *b𝄳* in Ma, but replace them in turn in the remainder of M and H2.

[88] 40 H3b, 97 H3, and 258 H3, all of which, incidentally, modulate in the same direction, being in 33. şehnaz or 30. hicaz.

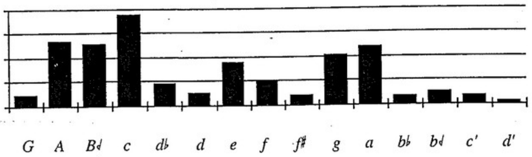

296
40 H1
Ma
b
c
d
H2
41 H1a
b
Ma
b
c
A
A
B
B
L
+
1.
2.


H2a
b
97 H1
Ma
b
Mc = H1, Md = Ma
H2a
b
258 H1
Ma
b
c
H2a
b
B
D
D
+
1.
2.

Example 34

above the prominent *a*, normally to *b♭*, but if not then to *b𝄳*, *c′* or even *d′*; descent from *a* is normally with *f* rather than *f♯*; in descent *d* is normally omitted; *c* is then a further area of elaboration; and the usual cadence is *B𝄳* (or *c*) *d♭* *c* *B𝄳* *A*. The H3 material in (or potentially in) sünbüle does not add to or significantly alter this picture.[89] A tripartite segmentation could again be imposed upon the general profile of this mode without apparent violence, but although there would little difficulty in defining p as consisting of the initial and quite extended area of elaboration together with any preceding ascent, the dividing line between q and r is less easy to determine: should it coincide with the *e* - *c* gap in descent, be located after the following elaboration of *c*, or even later? There are thus grounds for querying the appositeness of such a division in the case of a mode where, as here, formulaic cadences are just as frequently incorporated into the descent as they are added as elaborations after the finalis has been reached.

In the display of relative duration *c♯′* (one time unit) is omitted, but because of their functional differentiation (even if they are sometimes in complementary distribution), *d♭* and *d*, *f* and *f♯*, and *b♭* and *b𝄳* have been given separate entries. 41 H3 is excluded. We thus have:[90]



It may be noted that the combined values of *d♭* and *d* and *f* and *f♯* are still below those of the adjacent notes, so that in terms of durational salience the main notes *A B𝄳 c e g* and *a* clearly predominate. But the low value for *d♭* is a reminder that duration is not the only marker of significance: a note appearing relatively briefly and rarely can still provide vital coloration to a given context.

There remains the question of 259. Because it consists primarily of descending scale passages it would be possible to map it quite easily onto ex. 34. But that of itself is hardly

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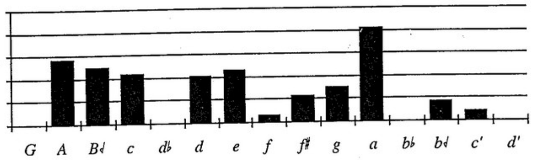
89 40 H3a is a essentially a device to transfer from *A* to *a*, but does so with a little more subtlety than a simple scale or ascending sequence: each cycle covers a fifth, the second and third successively higher (*A* - *e*, *c* - *g*, *f* - *c′*). 41 H3 is more extended, but is characterized by economy of means (and rhythmic ostinati). It confines itself to the *A* - *f* area, uses *d♭* throughout, could be largely represented as an elaboration of *c* (and to a lesser extend *B𝄳*), and although analysable in terms of a particular constituent element of sünbüle is perhaps best defined as a modulation into saba. 259 H3a is a simply transposition up a fifth of H2a.

90 The breakdown for the individual pieces is as follows:

	G	*A*	*B𝄳*	*c*	*d♭*	*d*	*e*	*f*	*f♯*	*g*	*a*	*b♭*	*b𝄳*	*c′*	*d′*
40	13	65	52	85	16	21	46	19	10	40	42	4	12	9	5
41	3.5	36.5	38.5	49	11	1.5	19.5	10.5	6	31.5	37.5	6.5	9	5.5	0
97	6	23.5	21.5	20	5.5	4	7	6	4	17	10	0	3	2	0
258	2	20	22	42	17	2	20	18	2	20	37	8	3	2	1
	24.5	140	134	196	49.5	28.5	92.5	53.5	22	108.5	126.5	18.5	27	18.5	6

sufficient to justify reinstating it. In general, as noted above, the melody in sünbüle always rises above *a* in the first area; descent is normally with *f* and without *d*; *c* is a further area of elaboration; and *d♭* usually appears in the cadence. 259 exhibits none of these features nor, as it omits both *d♭* and *b♭* and confines *f* to the *e f e* flexure, can it exhibit the patterns of alternation that appear to be typical. Comparison between the above display and the corresponding one for 259:



only serves to underline the differences in the salience of those notes from *c* upwards held in common, particularly *d* and *a*, the contrast strengthening, indeed, the suggestion that muhayyer would be a more appropriate designation. Yet the sünbüle heading for 259 cannot simply be set aside as a blunder, for the marginal entries in Cantemir's third index (p. 139) recognize the existence of two semais in this makam, presumably, therefore, 258 and 259, and it may be safer to conclude that even though 259 evidently exhibits none of the positive markers of identity associated with sünbüle there was a sufficient area of overlap between it and muhayyer for 259 to have been identified as the former, especially as it also fails, given its brevity and high degree of internal repetition, to develop features that would place it indisputably in the latter camp.

Mention has been made in relation to 19. nişabur of 160 H2 as illustrative of the upper register excursion into sünbüle deemed by Cantemir to be characteristic of that mode. In relation to ex. 34 schematic representation of 160 H2 would be confined to the area covering the elaboration of *a*.[91] What differences there are appear to be less of substance than of freedom, whether with regard to range, degree of repetition or the ordering of material.

22. . *kürdi*

The following pieces are in this mode:

154-6, 265, 304, 348[92]

and it is also exemplified in 296.

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91 It consists in the main of repeated ascending and decending scales from *a* up to *e′* followed by a large-scale sequence (*b𝄳* - *e′* - *a* // *e* - *a* - *d*) and then the typical sünbüle *a b♭ a* flexure with subsequent elaboration of *a* and final *g*.

92 A transcription of 154 is given in Feldman, op. cit., p. 317, and a transcription (with a different rhythmic formulation) and analysis of 265 at pp. 475-7.

With kürdi we are faced with a mode that ostensibly has the same pitch set as 17. nihavent; that the two are closely related is certainly implied by Cantemir's description of the latter, which, it may be recalled, speaks of a derived form of kürdi arrived at by changing the finalis from *A* to *G* or, more specifically, of one of two forms of kürdi distinguished by the identity of the finalis. He assigns them, nevertheless, to different categories, for while nihavent is defined as a terkib, kürdi belongs to the third type within his sevenfold categorization, that consisting of ascending (*nermden tize*) makams that use secondary notes. The nuclear outline begins (p. 35) by stating that it is characterized by *B♭* (the note nihavent) and, whether in ascent or descent, that its basic form is given by three notes (not specified but, presumably, *c B♭* and *A*), with *A* as finalis. The expansion begins by making the point that the initial is not *A* but *G*, and then gives the ascending line: *G A B♭ c d e f g*. The upper register, we are told, is developed in the manner of 35. acem, after which comes a descent to *G*, followed by finalis *A*. The form of the cadence attracts particular comment (pp. 35-6), being deemed unique. What characterizes it is an oscillation or pronounced vibrato on *B♭*, and the following comment makes clear that the oscillation is in the direction of the pitch beneath rather than above, the trough of the pitch wave in fact reaching as low as *A*.[93] (Because this feature is described specifically in relation to the cadence there is, however, no reason to conclude that *B♭* was realized similarly elsewhere in kürdi, nor, *a fortiori*, that this form of articulation was also employed in nihavent.)

If for the last few modes Cantemir's definitions have accorded closely with the evidence of the notations, in this case they do not. None of the six pieces, for example, begins from or around *G*, and in 156 and 304 H1 concentrates on descent, despite Cantemir's classification of kürdi as an ascending makam. It is also evident, in the initial stages at least, that the presumed similarity between kürdi and nihavent is illusory: the basic exposition contained in H1 reveals a general lack of congruence, and in the majority of cases they do not even share a common pitch set, so that the identity of the finalis is by no means the only factor of differentiation. Both pieces in nihavent present a clear (*G* →) *d* → *G* contour, and while in kürdi *d* is frequently prominent and a focus of elaboration the general melodic profile is considerably freer, beginning variously *d* → *f* → *d*; *A e d*; *g* → *d*; *d* (and in the other two case even with no particular prominence accorded to *d*); and ending with a descent that is variously with *B♭*, *B𝄳*, or neither. Cantemir's six examples of kürdi are thus by no means homogeneous, and the majority are characterized if anything not by the presence of *B♭* but, on the contrary, its general absence, which distances them both from nihavent and from his analysis, save to the extent that his final comments tally with the omission of *B♭* from the cadences of 154 and 155, whch jump from *c* or *d* to *A G A*.

The pieces from which *B♭* is completely absent are 154, 155, 156 and 348. 155 has no note between *A* and *c*, while *B𝄳* appears fleetingly in 154, rather more frequently in 156, where it is added to the cadence (*d A G B𝄳 A*), and even more so in 348, where the prominence of *e* allied to the general melodic physiognomy (including a simple descending cadence without *G* (*d c B𝄳 A*)) would suggest 58. hüseyni as a more credible locus.[94] But while the inclusion of *B𝄳* in this cadence clearly runs counter to Cantemir's description, it could be hypothesized that such need not be the case with the omission of *B♭* from the cadences of 154 and 155, which jump from *c* or *d* to *A G A*, for an oscillation between *B♭* and *A* could presumably be indicated just as accurately or inaccurately by the latter, and Cantemir could well have experimented with this form of representation before switching to the other. In any event, there are just two pieces in the notation of which *B♭* is included, 265 and 304, to which may be added the exemplification of kürdi in 296, and even among these we find that it is initially restricted in 304 to the cadence (*d c B♭ A G A*), being replaced by *B𝄳* elsewhere, so that it is in 265 and 296 that its use is concentrated. Setting these two aside, the remainder may be represented as in ex. 35 (with the indications of prominence in 348 being based on the 3 + 4 division proposed in 348c).

As this demonstrates, the material contained in M and H2 is somewhat less varied than that in H1, at least to the extent that, taken together, they present an ascent to, and descent from, a prominent *a*—thereby lessening somewhat the gap between kürdi and nihavent, where the same general profile appears.[95] But the connexions between the form(s) of kürdi exemplified in this block of pieces and that described by Cantemir are generally tenuous, and only in 304 can it be said that there is now a close correspondence with his specifications as to melodic development, and only in H2 does *B♭* begin to be used outside the context of the cadence.[96] As this composition is by Angeli, his teacher, it seems clear that his definition reflects not earlier tradition but contemporary compositional practice.

With regard to the differences within the kürdi corpus it might be hypothesized that a previously characteristic concluding gapped descent had been transformed—while remaining no less characteristic—by an oscillation on *A* extending to *B♭* which was then perceived as an oscillating *B♭*, and that (a non-oscillating) *B♭* then began to supplant the increasingly marginal *B𝄳* found elsewhere. If so, the brief exemplification in 296 would embody the final stage in this process, containing as it does only *B♭* and thus marking the point at which kürdi has arrived in the proximity of nihavent (which, indeed, immediately precedes it in 296).[97] It would follow, again, that Cantemir's analysis of the relationship between kürdi and nihavent is a rationalization of fairly recent developments, valid, if at all, only for part of the repertoire and most exactly for the point reached in 296.

However, on the basis of the evidence provided by the remaining piece, 265, it would appear that congruence with the pitch set of nihavent was a transient phenomenon, and that

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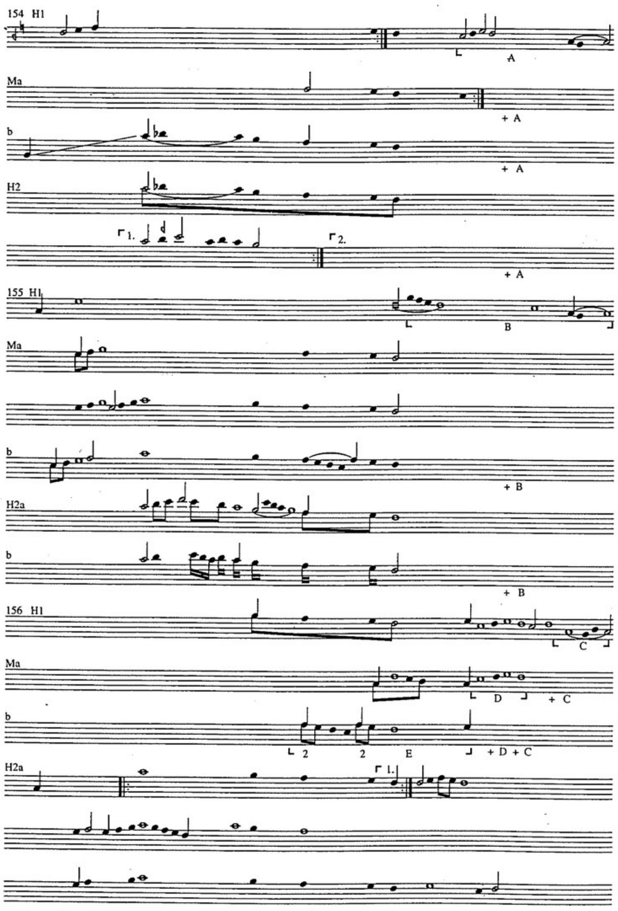
[93] آكاه اولكي كوردى مقامك قرارى سائر مقاملرك قرارينه بكزمز زيرا كرچه دوكاه پرده سنده قرار استراحت ايدر لكن / نهاوند پرده سنى بر مرتبه ده تديره در كه نهاوند پرده سى كويا دوكاه پرده سيله بر اولور.

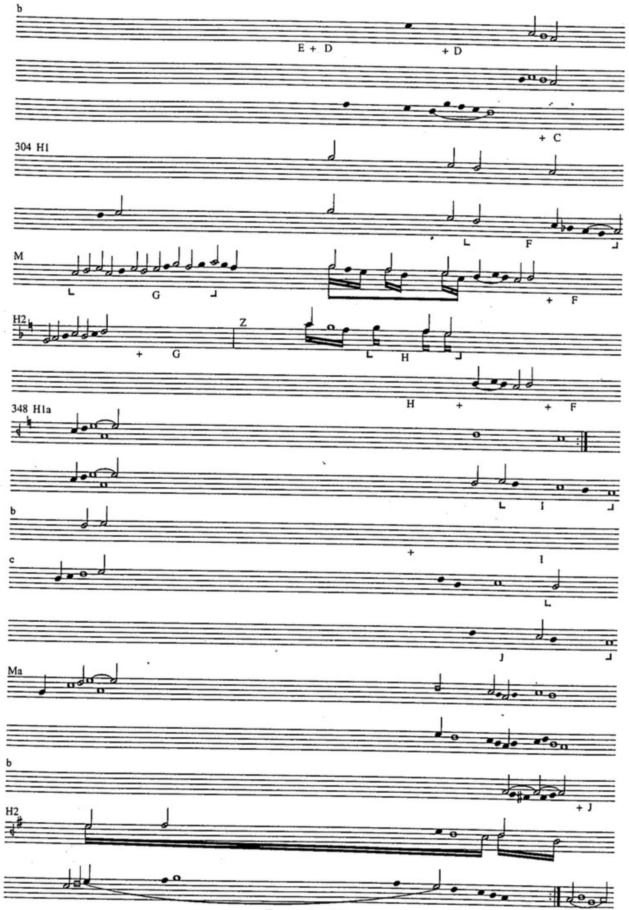
[94] It is in the course of a discussion of this piece that an indentification of kürdi with hüseyni is made by Rauf Yekta Bey ('La musique turque', in *Encyclopédie de la musique* (Lavignac), i, Paris, 1922, pp. 2945-3064, at p. 2979).

[95] There is a particularly clear resemblance between 155 Ma and 115 Ma. Where *a* is reached in M, H2 may ascend to *c'* or *d'* (154, 155).

[96] Cantemir's specifications are again flouted in 348, not only by the absence of *B♭* but also by the lack of any development in the upper register akin to acem: *f*, indeed, never appears, and *g* is the highest note.

[97] 348, in contrast, might conceivably represent a very early stage prior to the development of the gapped descent, which could then be thought of as being itself a form of differentiation marking kürdi off from hüseyni.


154 H1
A
Ma
+ A
b
+ A
H2
1.
2.
+ A
155 H1
B
Ma
b
+ B
H2a
b
+ B
156 H1
C
Ma
D
+ C
b
2
2
E
+ D + C
H2a
1.

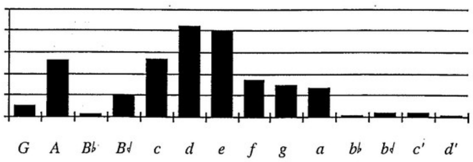

b
E + D
+ D
+ C
304 H1
F
M
G
+ F
H2
+ G
Z
H
H
+
+ F
348 H1a
I
b
+
I
c
Ma
b
+ J
H2

Example 35

kürdi was in the process of quite rapid evolution, the stabilization of *B♭* at the expense of *B𝄳* triggering both the parallel stabilization of *b♭* at the expense of *b𝄳* and also, in consequence, the introduction of an initial *e♭* in descending passages (*e♭ d c B♭ A*) parallel to others from *b♭* (*b♭ a g f e*), thus leading it in the direction of 26. beyati.[98] From ex. 36 it will be seen that the other development represented by 265 and 296, allied to the filling of the gap with *B♭*, is the extension of the cadence area, which now resembles much more the dominant pattern of modal discourse with its elaboration of the finalis.

Assuming that the inclusion of *e♭* in 265 does not indication a modulation, it is only in 348 H2 that there appears to be any departure from kürdi in the material so far examined. But modulation, which could accordingly be expected to be the norm in H3, occurs in only half the corpus,[99] the remainder returning to the territory of H1. This is developed in 156 in a more leisurely fashion over two cycles and in 304 over three (none of them containing material that could not be readily integrated into ex. 35).

In the display of relative duration *F♯* (2 time units, only in 348) has been omitted; *f♯* (4 time units, only in 348) has been subsumed under *f*; but *B♭* and *B𝄳* (and *b♭* and *b𝄳*) are given separate entries. We thus have:[100]



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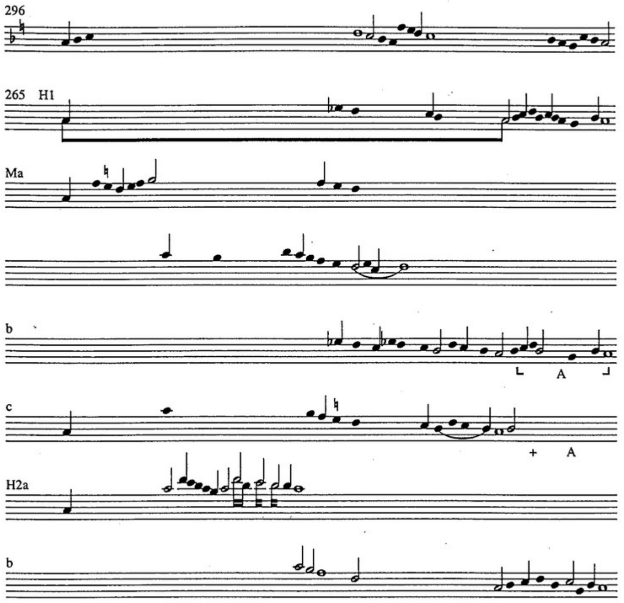
[98] However, while it is clear that in the context of mainstream Ottoman composition 265 must be regarded as an innovatory, forward-looking piece, it is conceivable that its unusual features (which include also significant rhythmic deviations from the semai norm) derived from a different regional tradition, for in Cantemir's third index the one semai noted for kürdi (p. 138) has the qualification *'acemler*. This possibility therefore casts some doubt on the interpretation offered of the development of kürdi.

[99] 154 has a modulation into 27. buselik (thus filling the gap with *B*) and then repeats H2b; 348 likewise has a brief episode in buselik followed by a high register passage reaching up to *d'* (but again incorporating *f♯*, so that there is no hint of 35. acem); 265 H3 appears to modulate in a number of directions, containing suggestions of 26. beyati and what will later be identified as araban, and in H3c using, like Mb in 116 (in nihavent), the transposed pitch set of 1. hüzzam, although given that here the finalis is *A* there is greater justification for interpreting this subsection as prefiguring the later emergence of saba zemzeme. These points are developed further by Feldman in his analysis.

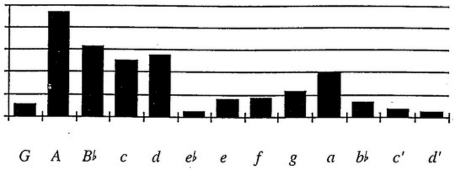
[100] The breakdown for the individual pieces is as follows:

	G	*A*	*B♭*	*B𝄳*	*c*	*d*	*e*	*f*	*g*	*a*	*b♭*	*b𝄳*	*c'*	*d'*
154	4.5	20.5	0	2.5	20.5	29	20	11	15	19.5	2.5	2	3	0
155	3	10	0	0	14	32.5	31	19	20	16	0	7	5.5	2
156	4	33	0	12	24	53.5	43.5	29	12	13	0	0	0	0
304	5	13.5	4.5	1.5	23.5	34.5	37.5	12.5	16.5	11	0	0	0	0
348	7	46	0	31	49.5	53.5	51.5	7	3	1	0	0	0	0
	23.5	123	4.5	46.5	126.5	199.5	187	82.5	67.5	60.5	2.5	9	8.5	2



Example 36

Apart from underlining the importance of *A*, *c*, *d* and *e* and the marginal status of *B♭* (and *b♭*), these figures serve to point up the contrasts between this group and 265 and 296, for which the comparable data are:[101]



Here it will be seen that there is a fairly even spread over *B♭*, *c*, and *d* (with *B♭* now relatively more salient than in nihavent). The salience of *d* is somewhat reduced and that of *e* much more so, the general effect being to contrast a tetrachord (*A B♭ c d*) with the previous gapped pentachord (*A c d e*). In the upper register *a* now stands out against the reduced salience of the remainder.

23. mahur

The following pieces are in this mode:

4, 206-8, 218, 246, 282, 287-9

and it is also exemplified in 296.

With mahur we return to firmer ground with regard to both the inner consistency of the corpus and the extent to which it correspond to Cantemir's account (pp. 42-3). This assigns mahur to the class of compound (*mürekkeb*) makams, the third in his sevenfold categorization, and begins by specifying the notes that characterize it, which are two secondary notes, one the eponymous *f♯*, the other *B*, and one main note, *G*. The importance of *B* and *G* is then reinforced by a statement to the effect that mahur is a compound of 27. buselik and 48. rast. In the expansion it is described as beginning from *g* and descending *f♯ e d c B* and then like buselik to *A* and thence to the finalis, *G*. In ascent, on reaching *e* it is permissible to dwell briefly on *f* as if beginning 35. acem, after which comes a descent to *G* via *B*.[102] Descent below *G* follows the pattern of rast, being either with *F♯* or *F♯*, returning in the same way to *G*.

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[101] The breakdown for the individual (sub)sections is as follows:

		G	*A*	*B♭*	*c*	*d*	*e♭*	*e*	*f*	*g*	*a*	*b♭*	*c'*	*d'*
265	H1	1	10.5	5	3.5	3	1	0	0	0	0	0	0	0
	M	2	14	14.5	8	12.5	1	6	4.5	5	4	0.5	0	0
	H2	1	7	3.5	3.5	4	0	0	2	4.5	12.5	5	3	2
296		0.5	7	2.75	5.75	3.5	0	0.25	0.25	0	0	0	0	0
		4.5	38.5	25.75	20.75	23	2	6.25	6.75	9.5	16.5	5.5	3	2

[102] لكن نرمدن تيزه واردقده وحسينى پرده سنه كلديكده براز عجم پرده سنى واغازه سنى كوسترمك رحصتى واردر انجق چوق مكس اوليوب آندن كنه عودت ايدوب بوسلك پرده سيله راست قراركاهنه كيدر.

There are nine pieces in all, since 218 and 282 are slightly varied forms of the same composition. The melodic differences between them are, as with other such pairs, of interest for the evidence they provide of permissible variation (whether in performance or notation), while a rather more striking distinction is provided by the fact that they are not assigned to the same rhythmic cycle, 218 being stated to be in muhammes (of 16 time units), 282 in düyek (of eight).[103] But none of this has any direct bearing on modal analysis, and for present purposes 282 will be discarded in favour of 218. The heading for 207 has no mode specification, but it is indubitably in mahur: it forms a set of three with the two flanking compositions in this mode, and is included in the mahur block in Cantemir's first index (p. 120).[104]

In comparison with previous examples, ex. 37 exhibits one major change, dictated by the increase in the number of compositions to be scrutinized. Whereas previously the material in H1 and M was combined with the further (usually high register) development in H2 to form a composite outline, here only the first exposition is covered, and its extent is determined not automatically by section boundaries (so that it is not necessarily coterminous with H1, M or both) but by closure, so that nothing is included beyond the first full cadence on *G*. What follows will be commented on as appropriate.

Also to be noted in ex. 37 is the mode signature, which captures a point passed over by Cantemir, presumably as self-evident, namely that the importance of *B* does not entail octave identity, and its upper octave equivalent is invariably *b♭*. Even the lengthy formulaic cadence, here written in full, which appears in 206, 208 and 288 (and with slight variations in 218 and 287) will have *b♭* when it appears in the upper register as against *B* in the lower. Two new rhythmic cycles appear in this corpus: in the common cycle muhammes, to which 218 is assigned, the prominent nodes appear to be time units 9 and 13; while in the unique and truncated form of darbeyn experimented with by Cantemir in 289 the equivalent positions appear to be time units 4, 8 and 12.

In contrast to certain other modes, in mahur a close family relationship is established at the outset. All pieces except 289 follow Cantemir's prescription of according initial emphasis to *g*, which is either attacked directly or, in three cases, arrived at by means of a brief ascending formula, *(E F♯) G e f♯ g*. The nature of the elaboration is also remarkable for its uniformity (and its extent, not always visible through the reductions but apparent from the data on duration below), being for long stretches confined to the *e* - *a* tetrachord.[105] If the flanking notes *d* and *b♭* were included the spans would, naturally, be even greater, in the case of 206, for example, covering all 80 time units of H1. Cantemir notes the possible inclusion of *f* in the context of an ascent to *e*, but apart from a fleeting appearance in 288 which is consonant with this description it is rather the case that within the initial exposition, at least, it can be defined as occurring in descent and, usually, in the context of a formulaic elaboration of *d*. *d* may function as a medial cadence or point at or from which the melody reverts to the

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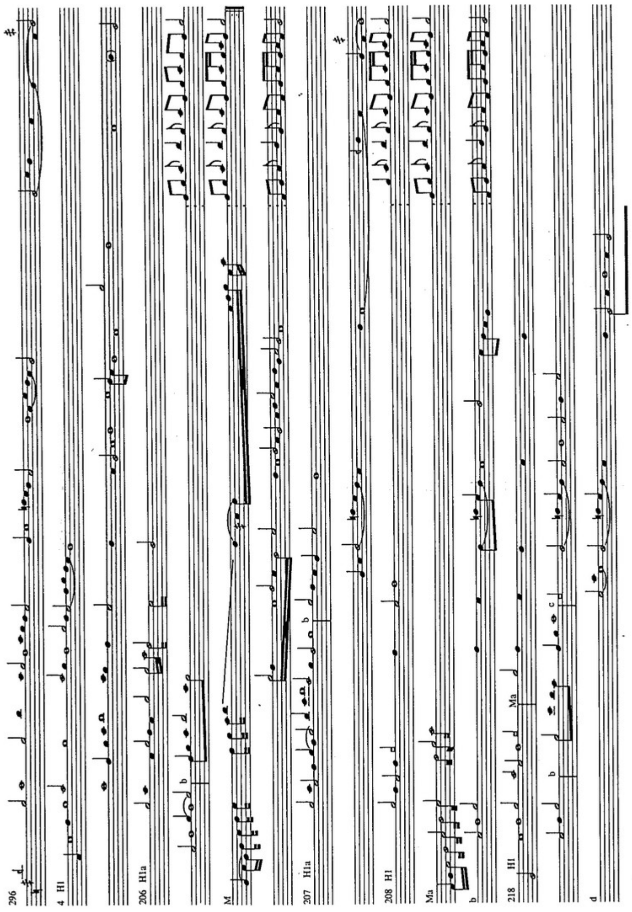
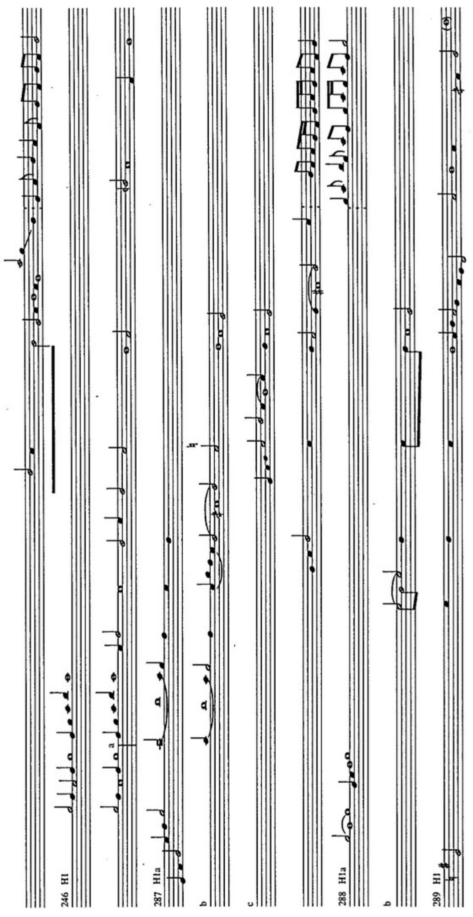
[103] It is for this reason that this pair failed to be identified in Part i.

[104] Cantemir enters it in the column of unknown (*nā-mevcūd*) pieces, and a later hand repeats it, with the page reference, in the known column.

[105] As in 4, where time units 2-36 remain in this zone; 206: time units 1-32; 207: time units 1-17; and 218: time units 3-37.


296
4 H1
206 H1a
b
M
207 H1a
b
208 H1
Ma
b
218 H1
Ma
b
c
d


246 H1
a
287 H1a
b
c
288 H1a
b
289 H1

Example 37

upper register, while if the descent proceeds there may be elaboration of the *B* - *e* area, *B* then being followed by either *A*, *A G* or *G* before the cadence. In two cases, 207 and 246, it will be seen that *B*𝄳 replaces the previous *B* in the cadence area, and it may be conjectured that this is a reflex of rast, one of the modes of which, according to Cantemir, mahur is compounded.

There is only one piece that deviates significantly from this general pattern: 289, by, perhaps not surprisingly, Cantemir himself. This completely ignores his own injunction to begin with *g*, fails to include *f*, and is at the same time the only piece in which the lower register below *G* is explored, something that his description takes account of, certainly, but which does not appear to have been a normal constituent of the expository phase.

All the material prior to H2 not included in ex. 37 could be accommodated within it quite readily, and thus provides no additional information of an essential nature.[106]

In a mode which begins in and to a considerable extent concentrates on the upper register it might be expected that H2 would simply develop this material further, possibly extending the range a little, with greater emphasis on the peak area around *b*𝄳, and that, in consequence, it would again provide nothing essential to add to the structural outline presented in ex. 37. This is indeed the case, and a verbal summary, which would be both tedious and indigestible, can safely be dispensed with, leaving just a few specific points to be made. In 218 variety in introduced by means of modulation: the range remains *f*♯ - *d'*, with *g* as finalis, but *b*𝄳 is replaced by *b*♭, thus suggesting 17. nihavent transposed up an octave. 287 presents a case of contraction rather than expansion, and can be analysed as a restatement of the basic outline after the large-scale development of H1, which fulfils the function of both H1 and M and is almost three times as long as H2. Lastly, in 289 H2 follows a rather more orthodox descending path (from an initial *g*) than had H1, and is followed in Z by a further elaboration of the *d* - *G* segment of the descent.

Given the high degree of congruence between H2 and what precedes, it might be anticipated that in H3 recourse would normally be had to modulation. But such is not the case, and apart from the fleeting introduction of *b*♭ in 246 H3a all pieces remain resolutely in mahur, as does 287 in H4 too. The development is along standard lines, with frequent scalar passages and sequences.

The degree of uniformity of melodic development that has been mentioned in relation to the lengthy initial elaboration of the *e* - *a* tetrachord may be observed in detail in ex. 38, which traces this area from its onset until either the melody descends through (or reaches a medial cadence on) *d*, or reaches *g* in an ascent that will go on to emphasize *b*𝄳. The abstract added above attempts to derive from this an underlying form (with alternative endings).

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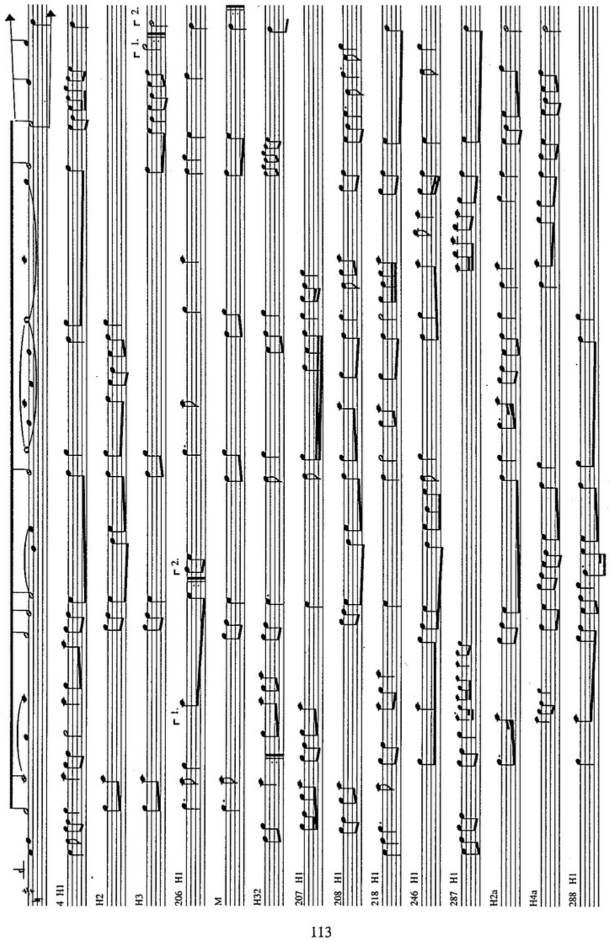
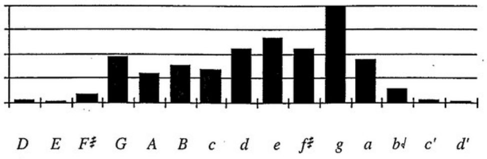
[106] It consists of 4 M, 207 M, 246 Mb, 287 H1d (there is no M in this piece), 288 M and 289 M. 4 M develops the *d* - *A* segment of the descent; 207 M and 288 Ma both closely resemble the first part of 206 M, ending on *g* (in 207 the following teslim repeats H1b, while in 288 Mb is a straighforward descent to *G*, with Mc an extended elaboration of the cadence formula); 246 Mb also begins with a rising scale, but resembles rather 208 Ma in then proceeding almost directly to a cadence on *a* (followed by a repetition of Ma); 287 H1d begins by repeating much of H1c (down to *F*) and then prolongs the descent to *D* (cf. 289 H1), followed by a jump to *B*𝄳 and exploration of the *c B*𝄳 *A G* tetrachord to be interpreted as an episode in rast; and 289 M at one point rises briefly to *g* but for most of its course develops at greater length the area between *G* and *e* already presented in H1.



Example 38

Such general similarities in material and procedure between the two areas suggests that little would be gained by supplying displays for data on duration which separate H2 off from what precedes. Elsewhere these might provide profiles contrasting expository and high-register sections, but in the case of mahur it may be useful to take a different approach, and test the assumption that despite some bias towards the highest notes resulting from a greater emphasis on the upper register in H2 the material that was excluded from ex. 37 should produce a profile closely resembling that for the material it does cover. We have, accordingly, two displays of relative duration (in which *B♭* is subsumed under *B*, *c♯* under *c*, and *f* under *f♯*, and from which *e'* (a half time unit in 207) is omitted), the first relating to the contents of ex. 37:[107]



Evident here is the dominance of the *e* - *a* tetrachord, which accounts for 53% of the total, although it may be noted that within it the eponymous *f♯* is less salient than the flanking *e* and *a*, a feature of secondary notes considered especially characteristic that has been remarked upon before.

The second display, which covers the remaining material up to the end of H2, omits both 218, where all of M is included in the first and H2 modulates, and the atypical 289. This explores the upper register a little more in H2, but given the registral emphasis in the preceding M and the following Z, the piece as a whole would only serve to increase the

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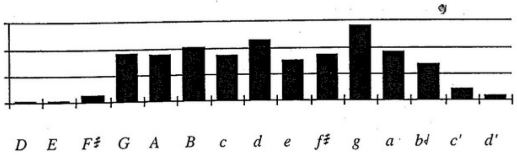
[107] The breakdown for the individual pieces is as follows:

	D	*E*	*F♯*	*G*	*A*	*B*	*c*	*d*	*e*	*f♯*	*g*	*a*	*b♭*	*c'*	*d'*
296	0	0	0.5	6.5	2	6.75	5.25	4.5	8	4	7.5	3	2	0	0
4	0	0	0	5	5	5.5	5	13.5	11.5	11.5	20	9	2	0	0
206	0	0	3	9.5	7.5	10	11	19	26	31	60.5	21.5	9	0	0
207	0	0	1	3.5	2	2	1.5	5.5	9.5	7.5	15	4	1	0.5	2.5
208	0	0	4	10.5	8.5	10	8	12	18	24	32	13	4	0	0
218	0	0	3	22	9	18	14	24	28	13.5	28	12.5	2	2	0
246	0	0	1	3	4	6	4	6	10	7.5	9.5	7	2	0	0
287	0	2	3	25.5	14	12.5	15.5	18.5	10	8	13	11.5	4.5	3	0
288	0	0	0	5	2	3	4	7	14.5	6	16	4.5	2	0	0
289	4	1.75	1.75	4.75	7.75	5	1.75	2.5	0.75	0	0	0	0	0	0
	4	3.75	17.25	95.25	61.75	78.75	70	112.5	136.25	113	201.5	86	28.5	5.5	2.5

percentages for the lower notes. *e'* (one time unit in 4) is again omitted:[108]



The total amount of material considered is virtually same (989 time units as against 1096 for the preceding table), and the general similarity between the two profiles is clear. Nevertheless, it will be seen that although there is, indeed, an increase in the percentages for the notes above *a*, this is not, as might have been predicted, at the expense of the lower notes (*A*, *B*, *c* and *d* are all slightly higher) but at that of the *e* - *a* tetrachord, which now counts for no more than 40% of the total, and although *g* remains salient it is comparatively less so than in the first display.

24. pençgâh

The following pieces are in this mode:

3, 27, 120, 126, 128, 242-4, 295, 301, 321[109]

and it is also exemplified in 296.

Fortuitously, pençgâh also follows mahur in Cantemir's exposition of the compound modes, although of greater interest is the fact that it resembles another mode already discussed, 22. kürdi, in exhibiting variant forms representing what may be presumed to be different stages of development. In this case, however, the diachronic implications are recognized by Cantemir himself, for whom pençgâh is a compound in more senses than one; indeed, he begins (p. 43) by referring to the existence of old (*ḳavl-i ʻatīḳ*) and new (*ḳavl-i cedīd*) definitions. According to the former, deliberately couched in the past tense, pençgah

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[108] The breakdown for the individual pieces is as follows:

	D	*E*	*F♯*	*G*	*A*	*B*	*c*	*d*	*e*	*f♯*	*g*	*a*	*b♭*	*c'*	*d'*
4	0	0	0	23	32	37.5	40.5	49	23	13	25	9	7	2	2
206	0	0	0	0	0	0	1	4	8	18	32	23	23	9	2
207	0	0	1	5	3.5	5	4.5	10.5	15	11	17.5	8	3	0	0
208	0	0	2	9.5	5.5	5	5	8	8	11	17.5	16.5	7	1	0
246	0	0	1	4	5	7	5	5	8.5	11	15.5	15	19	8	4
287	4	4	5	27	33	36	25	27	4	9	13	3	0	0	0
288	0	0	4	21.5	8.5	10	4.5	11	10	13.5	18	16	9.5	1	0.5
	4	4	13	90	87.5	100.5	85.5	114.5	76.5	86.5	138.5	90.5	68.5	21	8.5

[109] Feldman (op. cit., pp. 342-3) provides both a transcription of 27 (but with no mode signature for H2 and H3) and (pp. 343-4) an analysis, and a transcription (p. 487) of 243. On the derivation from 243 (proposed on pp. 487-90) of a later saz semaisi attributed to Cantemir see 5.4.

was a compound of 57. neva and 48. rast.[110] In Cantemir's estimation, however, this account is erroneous, giving a name to an entity that has no independent existence (*isim nā cisim*) since, as he points out, it cannot be differentiated from rast. Such a dismissal, it might be conjectured, could have as its justification concepts of category and serve principally to clear the ground for a different form of analysis but, in the event, the new definition (p. 44) which is then proposed relates to a radically different pitch set, for it derives pençgâh from three secondary notes, *f*, *c*𝄲, and *B*, and one main one, *G*, and regards it accordingly as a compound not of neva and rast but of 19. nişabur and rast. In the expansion, it is said to begin by emphasizing *G* and then to go to *A B c*𝄲 (like nişabur) *d e* and then via either *f* or *f*♯ to *g*. In the higher register it proceeds like rast and then descends as before (with *c*𝄲 and *B*) to finalis *G*. If the lower register is explored (down to *D*) it again proceeds like rast and returns to finalis *G*.

It is thus more that a little ironic to find that of the 11 pieces in pençgâh a clear majority (3, 120, 126, 128, 242-4) are notated with *B*𝄳 and *c*, that is, they conform to the old definition that Cantemir shows such alacrity in rejecting. Indeed, only two pieces (27, 321) and the exemplification of pençgâh in 296 are notated solely in terms of the new definition, while the remaining two (295, 301) are mixed, allowing alternative realizations. The notes to 295 in Part i discuss the particular compound form of notation used by Cantemir, and in support of the interpretation there given may be cited a remark in the *edvār* which follows the *ḳavl-i ʿatīḳ* definition, to the effect that all the peşrevs said to be composed in that form may be played according to the new form.[111] Considered in isolation, therefore, the evidence provided by Cantemir suggests a clear line of development: the old form (with *B*𝄳 and *c*) still predominated, although pieces so transmitted were also perceived as transformable into the new, while recent compositions—including one by Cantemir himself—are couched, and presumably conceived, only in the new form (so that the possibility of transforming them into the old is merely theoretical). The two pieces presented in alternative notations which make the trajectory from old to new forms explicit may have been considered, at least by Cantemir, to belong equally to both.

But it is also possible that he had at this point simply decided to experiment with notation, so that no particular status need be accorded them. It is certainly the case that the various guises in which pençgâh appears are not infallible indicators of relative age: as might be expected, of the seven pieces notated in the old form three (3, 120, 243) had previously been recorded by ʿAlī Ufḳī, but the same is true for one (295) of the mixed pair and, even more interestingly, for one (27) of those Cantemir notates only in the new form. Without this evidence this last might well have been considered a relatively recent piece, whereas it should rather be assessed as one which for Cantemir was no longer still hovering between its earlier and later manifestations but had already completed the journey to becoming one of those perceived as being exclusively in the new form. (For ʿAlī Ufḳī, who has no separate section for pençgâh, all the five pieces he records are classified as being in (or at least under the rubric of) rast, which raises question concerning the evolution of perceptions of modal

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110 قول عتیق نوا مقامی ایله راست مقامنی بر ایدوب پنچگاه مقامی اجرا اولور دیرلر ایدی .

111 جمله اول مقوله پشروات قول جدید اوزره اوقنه بلورلر .

identity and the loss and recuperation of terminology.)

Assuming, on the basis of Cantemir's analysis, that the difference in the pitch set between the old and new forms is immaterial as far as melodic contour is concerned, the pençgâh corpus may be considered as a single block in relation to his analysis of its structure, and the notation *B** and *c** will be used for the two variable notes. There is an immediate difficulty with Cantemir's initial statement, which can hardly be reconciled with the notations: only three pieces begin with *G* and even in these cases it is not afforded any particular emphasis. Equally, the following suggestion of an ascending development through the *G* - *g* octave fails to be corroborated by the evidence: characteristic, rather, is elaboration of *d* (which may be initial or approached either from below or above). This is just as true of Cantemir's own composition as it is of the others, and as he cannot here be depending on an earlier and no longer valid definition it is difficult to find a reason for his rather distorted account. It might be thought that it could result from his hand having been forced by the need to differentiate the new version from the old which, with its reference to a combination of neva and rast, seems a quite satisfactory shorthand encapsulation of a modal structure using main notes in which *d* is initially prominent and *G* the finalis; but his alternative encapsulation referring to nişabur and rast is equally cogent, and in the light of the fact that the initial phrase of certain pieces in nişabur is remarkably similar to that of certain pieces in pençgâh one might have expected a rather different account, perhaps one implying, as with nişabur, an initial *B*. The corpus also fails to bear out his claim that ascent can be via *f*;[112] further, while some pieces do proceed in the higher register in a manner akin to rast, a greater number exhibit a modal shift in which *f*♯ is replaced by *f*𝄲, reminiscent therefore rather of mahur.[113] Even more marginal is the rast-like exploration of the lower register that Cantemir refers to.[114]

With the exception of 301, where M is also given in order to include the jump to *g*, the presentation of the exposition in ex. 39 again covers material only up to the first cadence on *G*.[115] Because of the various possibilities no mode signature has been indicated in the *B** *c** area.

Given that the two contrasting pitch sets are equivalent and one (if not both) can be substituted for the other, it follows that in order to be a discrete and readily recognizable modal entity pençgâh would need not only to be distinguishable (negatively) from both rast and nişabur but also to be characterized (positively) by specific common features occurring across the pitch-set boundary. The exposition summarized in ex. 39 suggests that such is indeed the case. As already noted, the basic shape is dominated by the early and extensive elaboration of the area around *d*. *d* may itself be initial, although it is more frequently preceded by an ascent from *B** or a jump from *G*, while in two of the three semais it is

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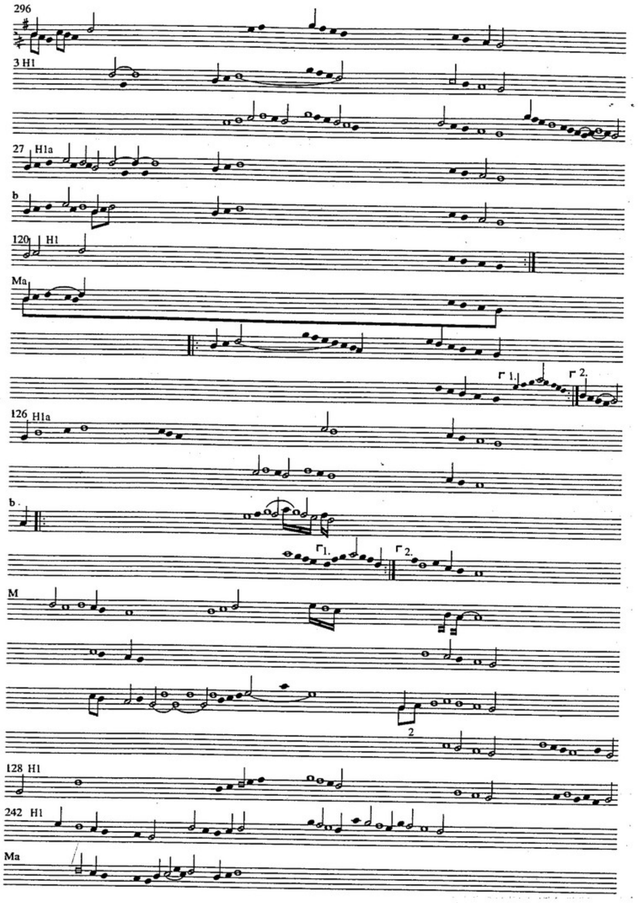
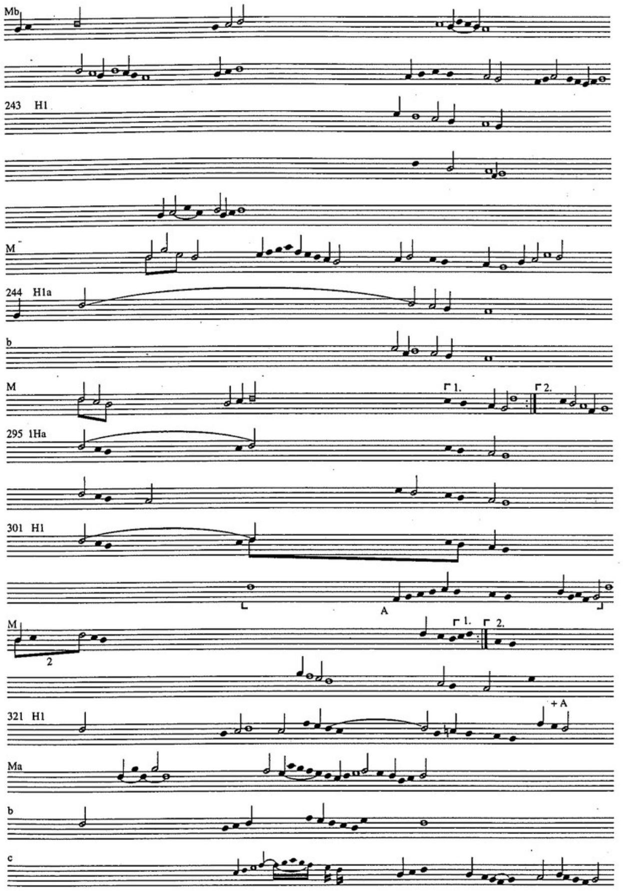
112 It is always *f*♯ that appears in ascent (*f*, in any case rare, is confined to descent and to the *e f e* flexure).

113 Although possibly Cantemir wished to imply that the higher register of pençgâh resembled the lower register of rast, where *F*𝄲 is preferred to *F*♯.

114 Discounting 242 (where the dip below *F*𝄲 is occasioned by the transposition down a fifth of the preceding *B c*𝄲 *d* cadence) the corpus of eleven pieces provides only one example: 128 Mb.

115 This occurs at the end of H1a in 295 and of H1 in 3, 27 and 128; and at the end of Ma in 120 and of M in 126, 242, 244 and 321. In 243 there is a descent to *G* in H1 and M, but in both cases followed by an ascent to cadential *d*. Both sections have been included.


296
3 H1
27 H1a
b
120 H1
Ma
1.
2.
126 H1a
b
1.
2.
M
2
128 H1
242 H1
Ma


Mb
243 H1
M
244 H1a
b
M
1.
2.
295 1Ha
301 H1
A
M
2
1.
2.
321 H1
+ A
Ma
b
c

Example 39

preceded by initial *e*. (Particularly striking is the emphasis given in 120 H1 to *B*𝄳: this occupies 11 of the total of 28 time units, and suggests initial identification with 45. segâh.) The elaboration often begins with a descent from and return to *d*, and sometimes also involves an alternation of *d* and *G*. An optional ascent, usually to *g*, is followed by a descent in the course of which elaboration is concentrated in the area of *e* and *d*, and there is then a further descent to *G*. There is a fairly even balance between those pieces in which the cadence material is integrated into the descent and those in which it may be regarded as an elaboration of finalis *G*. Balance (or rather the lack of it) might also be invoked in relation to the ternary division proposed above for a number of makam expositions, in this case as a major differentiating factor, with the first member (p) being inordinately long (and perhaps best thought of as consisting of two elements, p^1 the initial elaboration below *d* and p^2 the following elaboration of the *d* - *g* tetrachord), the second (q) short, and the third (r) optional.

It will be seen that when compared with nişabur there may be little to separate the two in the early stages of the exposition, especially if the *d G* alternation is avoided: the distinction only becomes clear in the following optional ascent, where nişabur has *f* and gives prominence to *a*, as against *f*♯ and *g* respectively in pençgâh, or, failing that, in the following descent, where in nişabur there is much greater emphasis on the elaboration of *d*, and the finalis is *B*. With rast, on the other hand, where the finalis is *G* and there is nothing in the pitch set to distinguish the two, the contrast is normally (but not always) provided by the beginning, and to that extent pençgâh could be described as an acephalic form of rast. 128 has the cadence formula noted as standard in 23. mahur (which also appears, incidentally, in 295 H3a) and 301 a variant thereof, but despite a common use of *F*‡ as a leading note there is no one pattern for which a particular association with pençgâh could be claimed: indeed, the *d* cadence in 243 demonstrates that *G* is not even the only possible finalis.[116]

The (sub)sections preceding H2 and not covered in ex. 39 generally fulfil expectations by conforming to, but at the same time expanding and reordering, the development of material in the initial exposition. It would therefore have been possible to integrate them without difficulty.[117]

In H2 several pieces, 27, 128, 242, 244, 301 and 321 (distributed, therefore, fairly evenly across what have been labelled the earlier and later groups) exhibit a preference for *f*‡ over *f*♯. This suggests both a modulation into mahur and at the same time a strategy sufficiently common to be considered a standard, if by no means obligatory, element of pençgâh:

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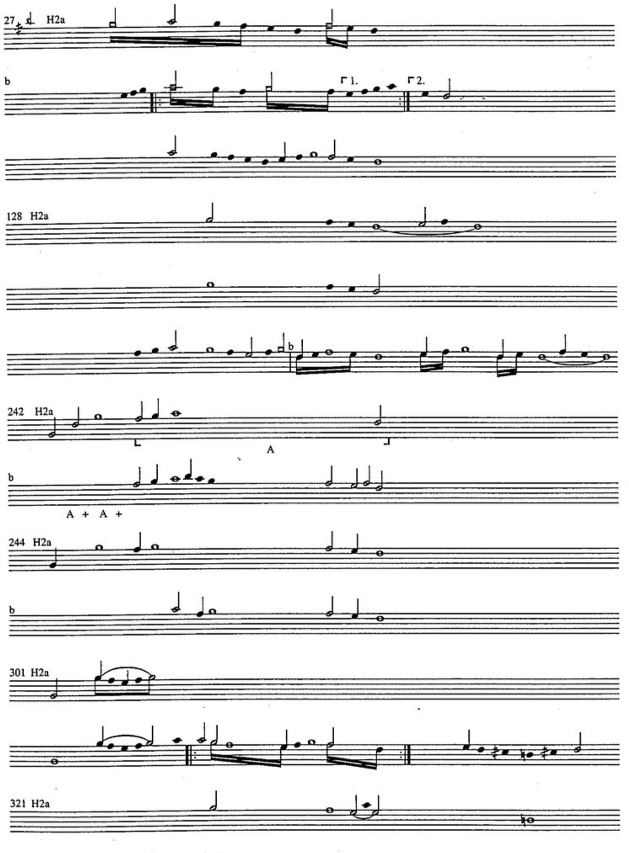
[116] The use of *d* here is particularly interesting as the finalis had previously been the expected *G*. Comparison with the 'Alī Ufḳī version shows that *d* was a medial cadence transformed into (and, more importantly, accepted and retained as) the finalis by the loss of subsequent material.

[117] They comprise H1b and M in 295; M in 3, 27 and 128; and Mb in 120. 3 M begins with a scalar ascent from *G* to *g*, but thereafter is dominated by extensive elaboration of *d*. 27 Md has an initial sequential rise reminiscent of that of 296 and equally analysable as an amplification of the *B** *c** *d* figure (as are also 295 H1b and c). 295 H1d and 128 Ma are concerned essentially with the core *G* - *d* pentachord, but 128 Mb gives more emphasis to *F*‡ (which would precede initial *G* on ex. 39) and includes a brief descent to *D* (which would follow final *G*). Worth noting in this piece is the extension of the basic descending arc structure to encompass the changing registral emphases in H1 and M, for H1 includes the upper *d* - *g* tetrachord while Ma and Mb concentrate on progressively lower areas. Also of interest are the areas of overlap between 243 and 242: 243 H1 **1-2** are very similar to 242 H1 **1-2**, and **4-5** are identical with 242 Ma **3-4**.



Example 40

In the presentation of this material in ex. 40 above, (sub)sections cadencing on *e* or *d* have been given complete while those cadencing on *G* have been tracked only as far as *d* in descent. An initial comparison between ex. 40 and the left half (down to *d*) of ex. 37 suggests that the identification with (the upper segment of) mahur is quite justified. However, 321 apart, which exceptionally ends on *e*, there is rather less emphasis on the typical *e f‡ g* mahur kernel, and it should also be conceded that, either considered separately or in conjunction with the material presented in ex. 38, there is not quite as close a family resemblance.[118] But whether or not this material is categorized as modulatory, its prevalence is such that it must certainly be considered a constitutive, even if not obligatory, element of pençgâh. Indeed, it may possibly have been an increasingly common one, encouraged by the consonance between *f‡* and the *c‡* of the new form.[119] Descent below *d*, omitted from ex. 40, occurs in 27 H2c, 128 H2b and at the very end of 242 H2b. The transition back to pençgâh that is thereby effected is made rather more abruptly in 301, where a cadential *d* is followed by a repetition of H1 **3-4**.

In the remaining pieces (3, 120, 126, 243 and 295) various strategies are adopted in H2, but they can be broadly classified on the one hand as similar to the above or extensions of H1,[120] and on the other hand as modulatory.[121] Other modulations appear, as expected, in H3, and here it is hicaz and the modes related to it that occur most frequently.[122] Elsewhere (or in what remains of H3) we encounter, as expected, a return to the material of the exposition.

Two displays of relative duration are supplied, not in order to contrast different zones but to present separate profiles for pieces notated only with *B𝄳* and *c* as against the remainder, even if the assumption must be that no dramatic differences will emerge. In each case they cover all the material prior to H2.

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[118] Ironically, one of the pieces that could have been inserted in ex. 38 quite readily is 244, in which H2 cannot have been conceived in terms of mahur, being simply a transposition up a fourth of H1.

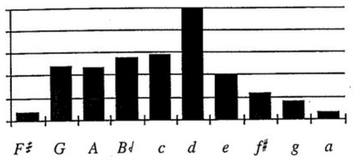
[119] In relation to which one may cite again 244: if H1 is played with *B* and *c‡*, the transposition becomes literal.

[120] 295 is similar to the above, while retaining *f♯*: it remains within the *d - a* pentachord and gives emphasis to *g*. 3 H2 inhabits the same territory as H1, but with greater prominence given to *g* (and including *a*), while Z reverts to the core *G - d* pentachord, echoing the beginning of H1. In 126 there is virtually the same economy of means as in 244, but on a much grander scale (and with no modulation): H2a repeats the beginning of H1b, followed by a descent in which *d*, *B𝄳* and *G* are prominent, and H2b repeats H1b entire.

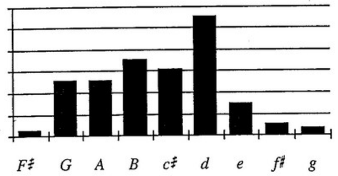
[121] 120 and 243. In the former, however, it is not until 30. hicaz is clearly signalled in the middle of H2b that H2a, based upon the *d - a* pentachord but containing the *d c‡ d* flexure, could be reinterpreted as also in hicaz. There follows a further modulation in H2c, of unknown identity. In the latter the *d - a* pentachord is also to the fore, and the *d c‡ d* flexure again appears, but *f* now predominates over *f♯*, thereby suggesting a transposition up a fifth of 17. nihavent.

[122] 244 again replicates H1, but this time transformed into hicaz. We also find hicaz in 128 H3a, followed by 33. şehnaz in H3b; hicaz mutating into 34. nigriz in 243; nigriz mutating into hicaz in 3; and nigriz in 321 H3b. Elsewhere we find 27. buselik (27 H3a 3-4 and H3b; and 120 H3a, b, but with finalis *G*), 17. nihavent (120 H3c), 45. segâh (126 H3a), segâh with a rast cadence (295 H3a) and, presumably, 26. beyati (126 H3b, but with *f♯*). Less easy to define is the modal identity of the first part of 242 H3, an elaboration of *d* with *e f e* and *d c‡ d* flexures. It is followed by a repeat of H2b.

In both, *F♯* is subsumed under *F‡*, *f* under *f♯*. In the first, *D* (one time unit in 128), *E* (half a time unit in 242 and one in 128) and *b𝄳* (one time unit in 126) are omitted. In 244 M only the seconda volta is counted and in 120 Mb only the second line, so that we have:[123]



In the second display, *a* (a half time unit in 321) has been omitted, as has 27 Mc (which repeats Ma), so that we have:[124]



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[123] The breakdown for the individual pieces is as follows:

	F‡	*G*	*A*	*B𝄳*	*c*	*d*	*e*	*f♯*	*g*	*a*
3	0	20	15	26.5	32	48	15.5	12	7	0
120	1	16	16	29.5	18.5	30	8	2.5	2.5	2
126	0	34	36.5	30	28.5	52	46	32	18	10
128	13	33.5	25.5	22	13	22	8	3	2	0
242	2	11.5	12.5	12	22.5	44	10	6	4	1
243	1	5	6	10.5	11.5	32	12.5	3.5	7	1
244	1	3	7	12	22	24	3	0	0	0
	18	123	118.5	142.5	148	252	103	59	40.5	14

[124] The breakdown for the individual pieces is as follows:

	F‡	*G*	*A*	*B*	*c‡*	*d*	*e*	*f♯*	*g*
27	0	13	16.5	28.5	27.5	46.5	17	1.5	1.5
295	2	33	38	39.5	34	40	5	0.5	0
301	4	12.5	10.25	17.25	12.5	30.5	6.5	1.5	1
321	2.25	8	4.25	10.5	10.5	32.5	11.75	11.75	6
296	0	5.5	2.5	3.25	1.75	4	1	0.5	1.5
	8.25	72	71.5	99	86.25	153.5	41.25	15.75	10

The two profiles thus resemble each other closely, and provide no evidence to suggest a contrast between the two types sufficient to undermine in any way Cantemir's claim that pieces notated (and presumably conceived) according to the first pitch set could also be performed in the second. There is certainly no significant difference below *d*, and although in the second table the value for *d* is a little higher, and for the notes above a little lower, this if anything serves only to emphasize the differences in distribution and prominence, already manifest in the notes below *c*♯, between this version of pençgâh and nişabur.

25. saba

The following pieces are in this mode:

12-4, 42, 92-6, 213, 276, 338, 343 (=338)[125]

and it is also exemplified in 296.

Like 22. kürdi, saba is categorized as an ascending (*nermden tize*) makam that uses secondary notes. Cantemir's account of it (pp. 36-7) is prefaced with one of the very few personal reactions he offers: its character, for him, is sweet and charming (*şirin ve laṭīf*). He then proceeds as usual, mentioning first the eponymous *d*♭ and then defining the initial, *A*, which is followed by *B*𝄳, *c*, to which some emphasis is given, and *d*♭, lightly touched.[126] The descent is on the same notes to *A*. In the expansion following this nuclear statement reference is again made to the fact that in the initial ascent *d*♭ is not dwelt on (*hiç meks eylemeyüb*). Ascent may continue further from *e* on main notes (therefore with *d'*, not *d*♭') up to *e'*, returning in the same way to the finalis, *A*. Mention is also made of the possible use of *f* in place of *f*♯. The modulatory family is said to consist of one 'used' terkib, ısfahan (because of the way it cadences), and, on earlier authority (*ḳavl-i edvār-ı ḳadīm*), four 'unused' terkibs: nigar, zirkeşide, zemzem and hümayun.

As with pençgâh, the significant variations in pitch set and melodic patterning that the saba corpus exhibits suggest that compressed within it may be different stages of historical development. The earliest would appear to be that preserved in the three darb-ı fetih pieces, 12, 13 and 14 (all of which had previously been notated by ʻAlī Ufḳī), with which may also be related 93. It is signalled most obviously by the absence or relative unimportance of *d*♭, which fails to appear at all in 12 and in the others is confined to the phrase *c d*♭ *c B*𝄳 *A*.[127] In origin this phrase may well be an elaboration of *c B*𝄳 *A*, set in the context of what would gradually emerge as another characteristic of saba, the omission of *d* in descent, the two combining to produce a formula (shown in ex. 41) that appears in no fewer than five pieces.

The second stage is represented by 92 and 95 (the latter another piece previously recorded

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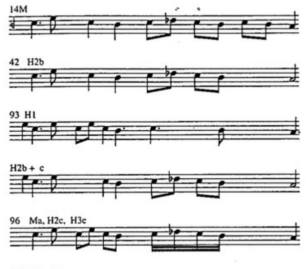
[125] Feldman, op. cit., pp. 443-4, provides a transcription of 94 juxtaposed with the later version made by Fonton.

[126] حركت اغازه سنى دوكاه پرده سندن شروع ايدوب وسكاه چاركاه چقوب آنده بر از مكس ايدوب صبا پرده سينى اوخشايه راق باصر .

[127] In 13 and 14 this appears just once in M, and in 93 is confined to (sub)section-final cadences but occurs, accordingly, five times in all. 93 differs from the others more significantly by omitting the initial uşşak-like exploration of the low register.



Example 41

by ʻAlī Ufḳī), in which *d* and *d*♭ appear with comparable frequency, but are nearly always segregated.[128] However, different in the latter is the fact that the *c d*♭ *c* flexure is expanded to *c d*♭ *e d*♭ *c*, so that 95 may be viewed as a transition towards the final stage, represented by 42, 94, 96, 213, 276, 338 and 296, in which *d*♭ may also be approached from *e*. Nevertheless, characteristic of this group is not so much the freer use of *d*♭ in ascending and descending contexts as the disappearance of *d* combined with the emergence of a new melodic typology in which *d*♭, *c* and *B*𝄳 form the increasingly important core of the *A* - *e* pentachord. (It is clearly to this last type that Cantemir's description relates, for he expressly says that *d* is omitted, and it may be added that his reference to the possible use of *f* in place of *f*♯ reflects the preference for *f* over *f*♯ shown in this group of pieces on the rare occasions in the exposition when the melody rise above *e*.)

The difference between this and the presumably earlier type is apparent from the abstracts displayed in ex. 42, which covers the exposition until the first cadence on *A*.[129] As this shows, the pieces in the first group begin by giving prominence to *A* and then ascend to *c* or *d*, whereas the majority of the last group begin with *d*♭ and *c* and descend to *A*. A further general distinction immediately apparent from ex. 42 is that the subsequent scalar ascent to *f*♯,

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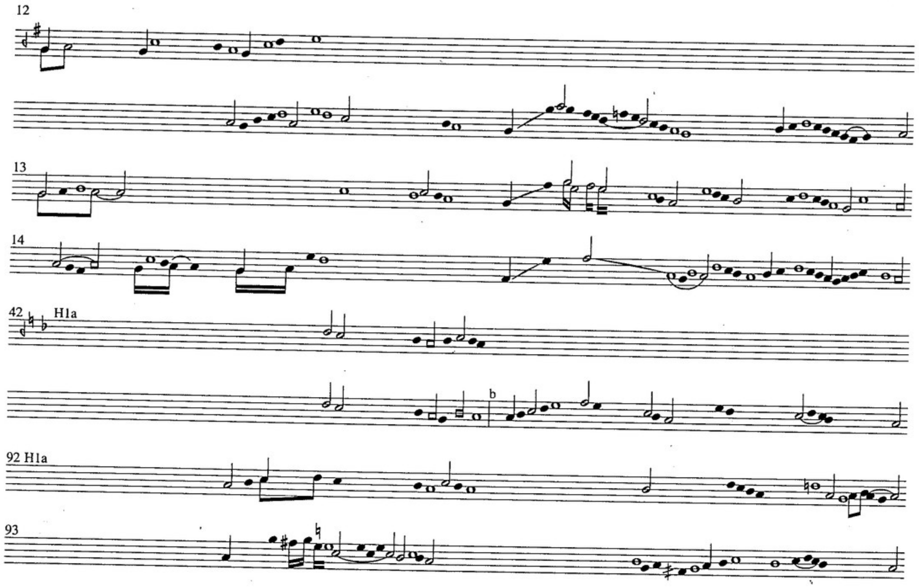
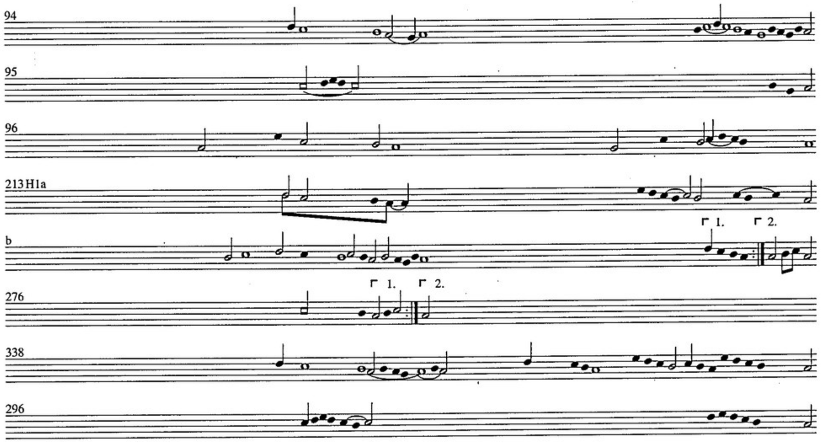
[128] In 92 H1 there is only one instance of *d*, and we otherwise encounter *d*♭. (Both here and in H3a, from which *d* is entirely absent, *d*♭ normally appears in the context of the *c d*♭ *c* flexure.) In 92 M, on the other hand, only *d* occurs. Similarly, in 95 only *d*♭ occurs in H1, Ma and (save for the last time unit) Mb 2, while *d* is confined to Mb 1 and the last time unit of Mb 2); both appear in Z, but again in separate zones).

[129] In piece 42 only the seconda volta version of H1a is included.





Example 42

g or *a* and following descent in the exposition of the first group is not matched in others, with the exception of piece 42 (which in any case substitutes *f* for *f*♯). These tend to restrict themselves to a narrower compass, typically *G* - *e*, and within that to emphasize *c* and the two notes flanking it.

Omitted from this seemingly neat and tidy account, however, is the awkward fact that 'Alī Ufḳī also includes two of what has been characterized as the later group, 96 and 276. This suggests either that there is something radically wrong with the above conclusions or, hardly less palatable, that the historical layering was already in place by the middle of the seventeenth century and had simply persisted unchanged down to Cantemir's day. Early seventeenth-century musicians may well have held differing views about saba, Sütçüzade, say, espousing a more conservative style than the composers of 96 and 276, but one would not expect oral transmission to perpetuate the distinction, even if the lack of any reference on Cantemir's part to varying opinions about saba could suggest that his contemporaries were quite accommodating in their views. However, it must be recognized, at least in relation to the pitch set, that the form in which 'Alī Ufḳī records these pieces does not always tally with Cantemir's, so that the distribution of *d*♭ and *d* is not same: it is already apparent from the relevant footnotes in Part i that where Cantemir has *d*♭ (typically in the flexure *c d*♭ *c*) 'Alī Ufḳī sometimes has *c*, so that the total possible incidence of *d*♭ in his versions is thereby reduced;[130] and it should also be observed that 'Alī Ufḳī's notations fail to mark any distinction between *d*♭ and *d*, i.e. *d* never has a flat sign attached. Given his somewhat cavalier treatment of accidentals this lack cannot be interpreted as meaning that *d*♭ was entirely absent, but it certainly excludes any determination of the level of its incidence.[131] At what point *d*♭ was first introduced, and how quickly it began to replace *d*, cannot therefore be established. But what is evident is that in 276 'Alī Ufḳī already provides an example (without *d* or *d*♭) of an initial exposition descending from *c* to *A* typical of what has been labelled above as the later group, so that this cannot have replaced an earlier type as a result of the increasing importance of *d*♭, although it may certainly have provided a suitable environment for its diffusion through the introduction, in the absence of *d*, of the *c d*♭ *c* flexure.

As might by now be expected, the material not included in ex. 42 that precedes a change of register or modulation provides nothing radically new. It could have been added to ex. 42 without significant recasting, and little would be gained by reviewing it in detail.[132]

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[130] Most spectacularly in 276 H1: *d*♭ occurs six times in Cantemir's version and not once in 'Alī Ufḳī's.

[131] So that, to take one obvious example, the reason for the editorial preference for *d*♭ in the transcription of 96 Mb is simply analogy with Cantemir's version, and it cannot be argued for on a strict reading of 'Alī Ufḳī's text. Similarly with the *d*♭ in 12 H3.

[132] Only a few salient points will be noted here. In 13 both M and H2 fall within this category and exhibit transitional features: *d* remains prominent, but there are examples both of the (*c* -) *e* - *c* jump and of the *c d*♭ *c B*𝄳 *A* formula. (Similarly with 14 M, which provides one of the entries in ex. 41.) In 42 Mb cadences on *G*, but *A* is again the finalis in Mc, incidentally a repeat of H1b. Md is a sustained example of concentration on the *A* - *d*♭ core, within which the melody remains throughout all 80 time units, while 94 also provides examples of extended development: Ma may be viewed as a vast elaboration of *c* and Mb as an elaboration of the final quarter of ex. 41, from *G*. Striking in 96 Ma is the near coincidence of the melodic line with that of the beginning of 93 H1, while Mb and c provide another instance of concentration on the *A* - *d*♭ core. 213 M and 276 M, similarly, are confined over a span of 112 time units each within the *G* - *d*♭ and *G* - *e* ranges respectively.

Although H2 fails to move into new territory in 13, in the remaining pieces it behaves as expected. It may stay broadly within the same range and modulate, generally towards 58. hüseyni, as in 14, 95 and 213, or shift to a higher register, with a clear preference for the pitch set *e f*♯ *g a b*𝄳 *c'* (even in pieces hitherto using only *f*). Here *a* is clearly pivotal, and the melodic development is sufficiently similar to warrant considering this section, which appears in 12, 42, 92, 94, 276 and 338,[133] not as a modulation but as an integral if optional element of saba. The material it contains is displayed in ex. 43,[134] which tracks it, if there is no section-final cadence on *e*, as far as *e* in descent and also includes, where it occurs, the following transitional *e* - *c* jump.

In the remaining piece, 96, H2 both moves into the upper register and begins a series of modulations (including 21. sünbüle, 14. çargâh, 33. şehnaz and 18. hisar) which extends into H3, and in the corpus in general modulation in H3 is frequent. The first two in 96 might be considered inherent modulations, both having features in common with saba: in the former *a* is prominent,[135] in the latter *c*. Most of these modulations are also to be found in other pieces, and although çargâh fails to recur, sünbüle appears with the frequency its presumed proximity might warrant,[136] and şehnaz and related modes are also frequent.[137] As for hisar, it gives its name to 12, taking up the major part of M. The only points to be added here are that in a piece from which, as recorded by Cantemir, *d*♭ is absent, it may not be wholly fortuitous that the *d*♯ of this particular modal shift provides a further substitute for *d*, thus representing yet another transformation of the crucial *c* - *e* space; and that in the following descent returning to saba we encounter the sole instance before H3 of the *e* - *c* jump followed, interestingly, by a brief (and, in the context of the piece as a whole, atypical) development of the *A* - *c* area.

As before, in those cases where H3 marks a return to (the lower register of) saba, there are few surprises. The pieces in question are 14, where *A* is particularly prominent, 213, which conforms closely to the typology displayed in ex. 42, and 338, where H3a begins by repeating the first one and a half cycles of H2c an octave lower, and H3b departs from the basic outline by include a brief descent to *D*.

The display of relative duration is again divided, the presumed early group being shown separately from the later one, with the two transitional pieces, 92 and 95, omitted from

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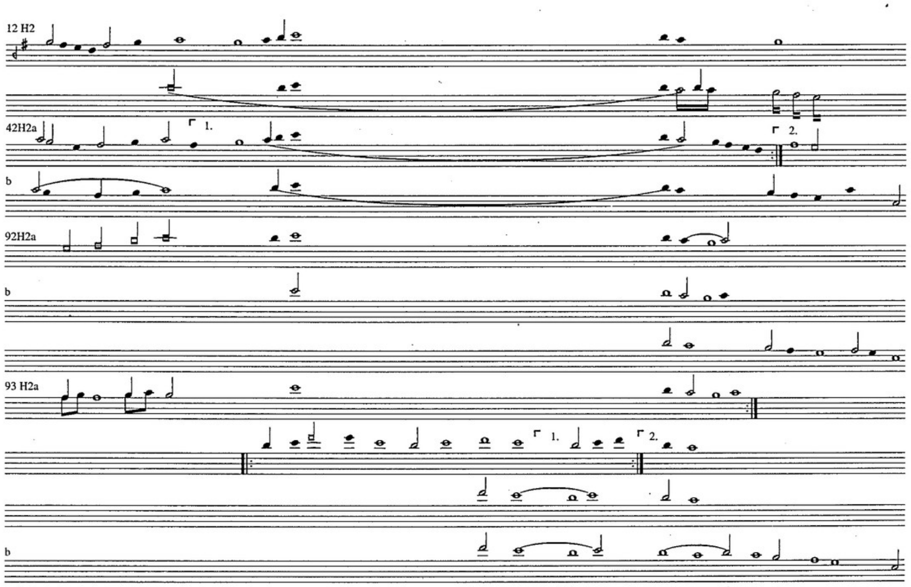
[133] There is a related and longer passage in 93 which extends the range further to include *d'* and *e'*.

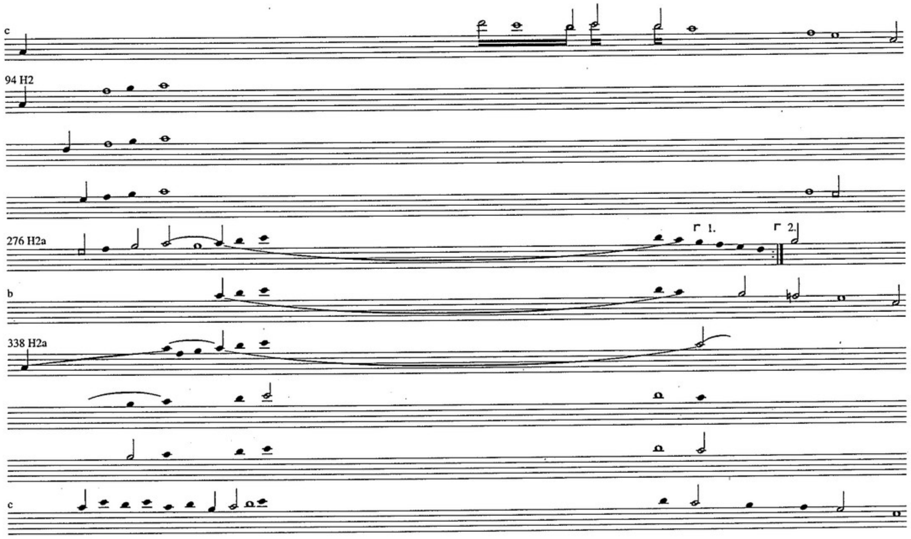
[134] Which omits, however, 338 H2b. This includes *d*♭*'* and provides one of the only two instances of the use of the *A* - *d*♭ core in the upper octave.

[135] And further linkage is provided by the use in H2a and b of the *e* - *c* jump in descent.

[136] Indeed, this might well be adduced in justification of the unexpectedly early shift into sünbüle exhibited by 92 Mb (after which Mc, also analysable as hüseyni, gradually reverts to what is more clearly established as saba in Md).

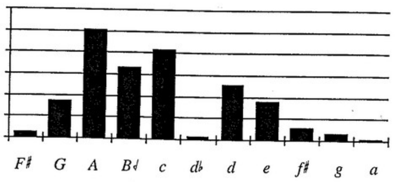
[137] In 13 H3 we find şehnaz, or perhaps rather the related 30. hicaz followed by şehnaz, while 42 H3a begins by transposing the first part of H2 down a fifth to *d*, substituting at the same time the hicaz pitch set, and continues in H3b with a further transposition of the same beginning to *e*, after which a hüseyni-like descent to *A* is followed by a brief reference to şehnaz before the final return to saba. Another appearance of şehnaz is in 95 H3b, while hicaz occurs in 93 H3a, 94 H3 (a transformation of H1), 95 H3a and 276 H3. The combination of hicaz and saba points in the direction of 16. ısfahan, which for Cantemir is a modulatory terkib of saba, yet none of these passages appears readily identifiable as ısfahan.



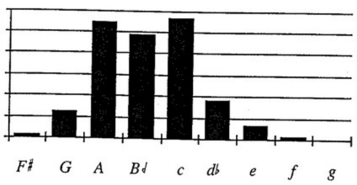


Example 43

consideration. In each case the material covered includes the complete development until any change of mode or register, so that in the first group we have 12 H1, 13 H1, M and H2, 14 H1 and M, and 93 H1 and M. *F*𝄲 is subsumed under *F*♯. We thus have:[138]



In the second group H1 and M are included for all pieces. *f*♯ (half a time unit in 96) and *d* (one time unit in 94) are omitted:[139]



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[138] The breakdown for the individual pieces is as follows:

	F♯	*G*	*A*	*B*𝄳	*c*	*d*♭	*d*	*e*	*f*♯	*g*	*a*
12	1	12	25	9	13	0	13	8	3	2	2
13	2	26	67.5	44	53	1	30	25.5	9	6	0
14	3	15	49.5	34	37	1	19.5	12	2	1	0
93	3	9	39	33	45	3	30	20	6	4	0
	9	62	181	120	148	5	92.5	65.5	20	13	2

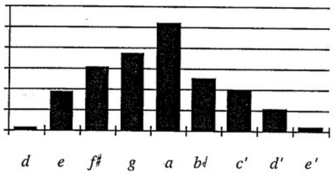
[139] The breakdown for the individual pieces is as follows:

	F♯	*G*	*A*	*B*𝄳	*c*	*d*♭	*e*	*f*	*g*
42	2	16	78	67	87	28	12	4	2
94	1	16	28	17	20	7	4	2	0
96	0	5.5	30	30	40.5	5.5	6.5	1	0.5
213	0	14	56	48	62	25	3	0	0
276	0	4.5	34.5	44	48	17	4	0	0
338	4.5	5.5	49	39	26.5	10.5	5	0	0
	7.5	61.5	275.5	245	284	93	34.5	7	2.5

The major difference these figures reveal reinforces the findings above: the increase in the percentages for *B*𝄳 and *c* is a function of the greater concentration on the *A B*𝄳 *c* trichord specifically and the *G* - *e* zone generally, and there is a concomitant diminution in the use of higher pitches, which now represent just under 1% of the whole as against a previous 5%. Together with the retreat of *d* and the advance of *d*♭, these developments mark a significant shift in the physiognomy of saba and point, whatever the problems of dating, towards the emergence of a recognizably modern form of this makam. (It may be added, however, that despite the increased importance and frequency of occurrence of *d*♭ implied in Cantemir's account by its explicit omission of *d*, these figures bear out his remarks to the effect that it was lightly touched and not dwelt upon.)

The omitted pair contain nothing to alter this view. Broadly speaking, the figures for 92 (omitting Mb as a modulation), in which *c* is not especially salient and *e*, *f*♯ and *g* have some representation, align themselves with the first group, which those for 95, in which *c* has easily the highest figure and there is no pitch above *e*, are much closer, the representation of *d* apart, to the second group.

The following is the display of relative duration for the material of which ex. 43 provides an abstract:[140]



However, it is clear from the breakdown that the impression of a nearly symmetrical reduction in importance corresponding to distance from the central *a* is factitious, for the percentages for the higher notes above *a* depend heavily or exclusively upon 93, which is evidently atypical. If it were set aside *e'* and *d'* would disappear, and the percentage for *c'*, especially, would be much reduced. On the other hand the general gradient of the lower notes would be little affected, and the peak for *a* would remain equally pronounced.

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[140] The breakdown for the individual pieces is as follows:

	d	*e*	*f*♯	*g*	*a*	*b*𝄳	*c'*	*d'*	*e'*
12	1	4	8	13	18	5	3	0	0
42	1.5	9	19	18	23.5	7	2	0	0
92	0	11	14	19	24	10	6	0	0
93	0	6	20	31	43	34	35	31	7
94	2	7	8	6	8	0	0	0	0
276	1	17	19	18	13.5	8.5	3	0	0
338	0	2	1.25	4.75	21	10.75	7.75	0	0
	5.5	56	89.25	109.75	151	75.25	56.75	31	7

26. beyati

The following pieces are in this mode:

17, 58, 100-2, 159, 236, 264, 286, 330, 331, 347, 351[141]

and it is also exemplified in 296.

331 and 351 are different versions of the same composition, and in what follows 351, the less detailed of the pair, will be disregarded. 330, although assigned to beyati, is at the same time a variant of 61, which Cantemir classifies as in 52. arazbar (and ʻAlī Ufḳī as in 58. hüseyni), and there can be no doubt that these latter designations are preferable (as well as furnishing another example of changing lines of demarcation). Accordingly, 330 will not be considered further here,[142] so that there are 11 pieces in all to be examined.

Cantemir assigns beyati to the same category as saba, that of an ascending (*nermden tize*) makam that uses secondary notes. The nuclear description (p. 37) specifies *A* as initial, defines an ascending line (*A B*𝄳 *c d*) exposition similar to that of 57. neva, and signals that *d* is prominent and that *e*♭ oscillates.[143] The expansion then defines the range as continuing in ascent on main notes, but beginning from *f*♯ rather than *e*, which is omitted, up to *e*♭′ or *e*′. In descent *e*♭ is lightly touched and *d* is again prominent. The range may extend down to *D*, and the finalis is *A*. The final remark points out that *f* may be used (in place of *f*♯), but that this leads towards the terkib arazbar.

We are faced in beyati with a problem analogous to that encountered in saba, for the eponymous note, in this case *e*♭, is not just rare but completely absent from three of the pieces Cantemir assigns to it (159, 286 and 347), while in a fourth (101) it fails to appear in H1 (=M), where all the basic features are normally displayed, delaying its entrance until H3. However, despite the fact that this group, if group it is, would seem to be more akin in this respect to beyati in its modern form, it is by no means clear that any convincing diachronic conclusions can be drawn: the fact that only two of the pieces in Cantemir's beyati repertoire had been recorded by ʻAlī Ufḳī suggests that its average age was not particularly high, so that historical trends might not be easy to establish: considered in isolation, the contrast between 347, one of the pieces known to ʻAlī Ufḳī and at the same time one of those from which *e*♭ is absent, and 331, which is by Cantemir himself and uses *e*♭ liberally, would if anything point to a progressive increase rather than decrease in the use of this note during the course of the century. Broadly speaking, all the pieces without *e*♭ accord prominence in the initial stages to a descending exposition of the *A* - *d* tetrachord, but this is not a feature unique to beyati and there seems to be no good reason why the beginning of, say, 159, could not with equal justification be assigned to 57. neva or that of 347 to 55. uşşak.[144]

In the other eight pieces both *e*♭ and *e* occur, but in different environments: only once, exceptionally, are they juxtaposed.[145] As might be expected, *e*♭ is preferred to *e* in the flexure *d e*♭ *d*, to which, indeed, it is virtually confined.[146] In general, it appears to be the case that although *e*♭ was evidently characteristic it was normally less frequently used than *e*, and the contexts in which it could appear were more limited (there is no instance, for example, of the *d e*♭ *f*♯ *g* ascent that Cantemir refers to); given that the combination of other features of melodic movement and pitch organization must have been considered generally sufficient to secure modal autonomy, despite areas of overlap and possible confusion, it was ultimately not indispensible.

A further area of variability concerns the pitch above *e*: the examples cited above all have *f*, but in other pieces we encounter *f*♯. The more common of the two, again contrary to the implications of Cantemir's description, is *f*, which occurs in all pieces except 159 and 347 (which also lack *e*♭), but in the three where both occur (58, 101 and 286) it is *f*♯ that is the more frequent, *f* typically appearing in the flexure *e f e*. But it is not simply the case that in the exposition the choice of one or the other was a matter of indifference as far as the identity of beyati is concerned, rather that there was a choice of melodic strategy available between a rising scale passage from *d* or *e* (*e*♭ never appears in this context) to *g* (or, in 159, *a*), which requires *f*♯, or a corresponding jump and following descent, which requires *f* (yielding phrases such as *c* (or *d*) *f e d c*).

For the most part the abstracts displayed in ex. 44 only cover the material up to the first cadence on finalis *A*,[147] but in 17 coverage is extended to include the first appearance of *e*♭ (in M), and 101 H3 is also added for the same reason. In order to demonstrate clearly the striking uniformity, rhythmic as well as melodic, of the majority of cadences they will (beyond the dotted bar line) be notated in full. The rhythmic cycle of 101 is frenkçin, in which the internally prominent nodes appear to occur at time units 4, 7 and 11; that of 102 is devr-i revan, a faster counterpart of devr-i kebir with the same 3 + 4 + 3 + 4 internal structure, but in which, given the tempo differentiation, only time unit 8 will be marked as prominent; and that of 286 is sofyan, a four time-unit cycle in which there is no internally prominent node.

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[141] Feldman, op. cit., provides transcriptions of 100 (pp. 397, 400), 102 (p. 401), 264 H1 and M (p. 399) and 286 (p. 396).

[142] As well as to different modes, 330 and 61 are ascribed to different composers, the former to İbrāhīm Aġa, the latter to Nefīrī Behrām (hence the failure to identify this pair in Part i). In Cantemir's first index, 61 is listed (p. 118) as a known (*mevcūd*) peşrev, but the authorship of Nefīrī Behrām has been crossed out by a later hand for which it is a *naẓīre* of (presumably 330 (!) by) İbrāhīm Aġa. The beyati list on the preceding page refers to 330 as an unknown (*nā-mevcūd*) piece by İbrāhīm Aġa, and the later addition of the (correct) page number has been crossed out.

[143] حركت اغازهٔ مقام بياتى دوكاه پرده سندن شروع ايدر آندن سكاه چاركاه ونوا پرده لرى نوا يوزيندن چقوب نوا
اوزرينده بر جوزئ مكس ايدوب بياتى پرده سنى تدّيره در .

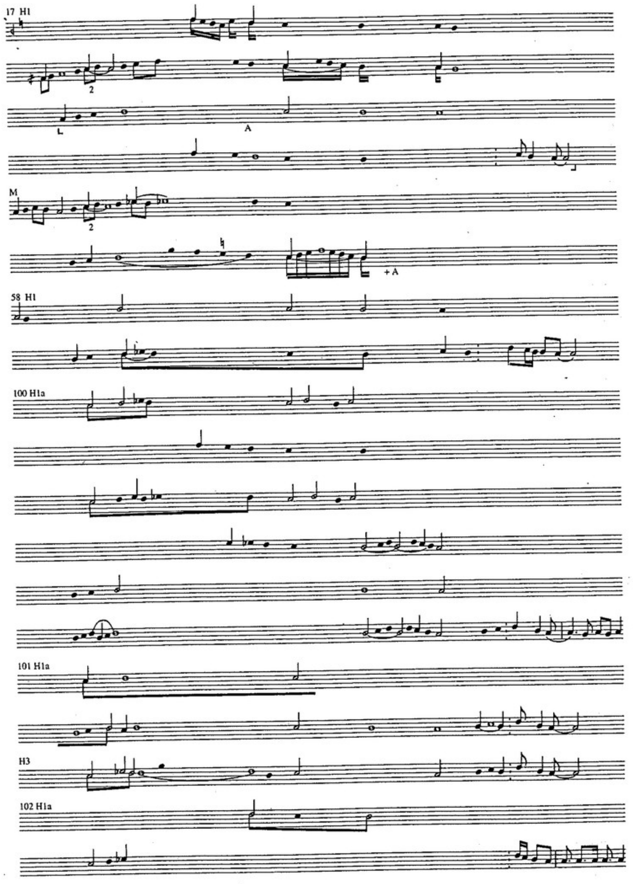
The same term for oscillating is used as in the description of *B*♭ in the cadences of 22. kürdi, but here nothing is said to indicate whether the oscillation was above or below the normal intonation.

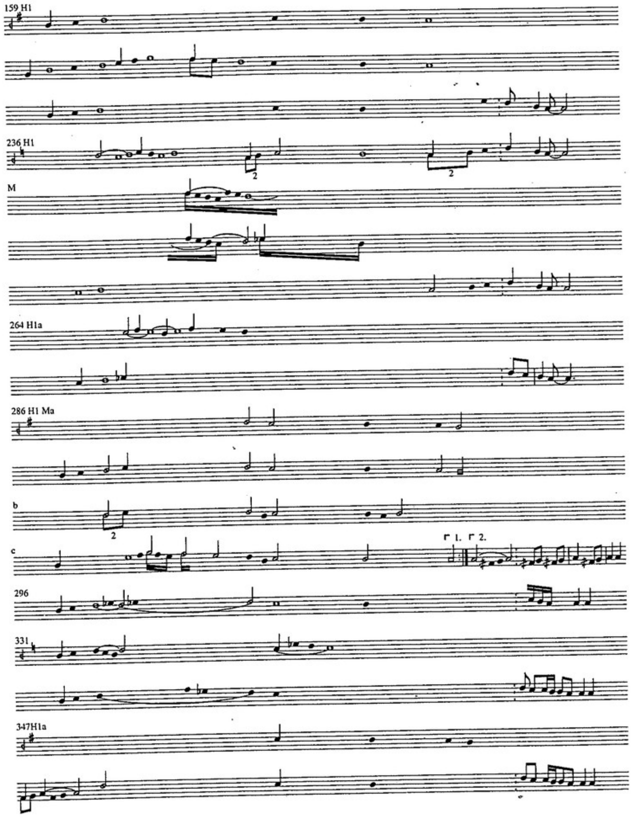
[144] As an example of such overlap and variable attribution may be cited 98, a piece which for Cantemir is in uşşak but which had earlier been classified by ʻAlī Ufḳī (*Mecmûa*, p. 143) as in beyati (this identification fails to be made in the footnotes to 98 in Part i).

[145] 100 H1 8.

[146] So that the following ascending line in which it is retained in 17 Z: 41-50 (*c B c d e*♭ *d e*♭ *f g a*) is rather exceptional. Normal, in contrast, is the use of *e* in the ensuing descent (as also at the very beginning of 17 H1), so that typical passages in which both appear are *a g f e d e*♭ *d c B*𝄳 (100 H2 3-4) and *c f e f e d e*♭ *d e*♭ *d c B*𝄳 *c* (17 H3: 33-49). But in 102 H1a *e*♭ is introduced in a passage which is later repeated twice in H1b, but with *e*.

[147] Which occurs at the end of H1a in 100, 101, 102, 264, 331 and 347 and at the end of H1 in the remainder.


17 H1
2
L
A
M
2
+A
58 H1
100 H1a
101 H1a
H3
102 H1a


159 H1
236 H1
2
2
M
264 H1a
286 H1 Ma
b
2
c
1.
2.
296
331
347H1a

Example 44

Thus presented, beyati has a familiar ternary air, seeming to consist in essence of an ascent to *d*, which is often prolonged (p), with an optional continuation of the ascent as far as *g*, and a following descent to *A* (q) followed, in most cases, by a cadential elaboration thereof (r).[148] There is, however, considerable variation with regard to the ordering of events between and within p and q, as shown in particular by the lack of uniformity concerning how to reach *d* for the first time.[149] Thereafter, however, it is possible to speak of a greater degree of convergence: the optional ascent to (and descent from) *g* may be regarded as an elaboration of *d*, after which in descent there may also be elaboration of *c* and *B*𝄳, and there may be a further exposition of all or part of p and q before the final cadence area is reached. This exhibits even greater convergence, and although there is one exception to demonstrate that the descending figure with, in most cycles, its formulaic arrival at the finalis on the fifth rather than the fourth time unit from the end was not obligatory, it may be considered, although by no means exclusive to beyati, certainly characteristic of it.

The remaining material preceding development of the higher register[150] could be mapped without difficulty onto ex. 44, and requires little comment: we consistently encounter a more extended exploration of the core *A* - *d* tetrachord, usually with greater emphasis on the two upper notes. This is preceded by a descent from *f* in 100, from *f*♯ *(g f*♯*)* in 101, and from *g* in 331.[151]

In the development of the higher register, which normally occurs in H2,[152] there is, as with 25. saba, a clear preference for the main notes *f*♯ and *b*𝄳.[153] But whatever the pitch set, the general melodic contour has a very similar arch form, comparable to that presented in ex. 43 (although cadencing on *d* rather than *e*) and, in the same way, may reasonably be considered not a modulation but an integral element of beyati. With the exception of 58 H2, which has finalis *a*, the H2 material is displayed in ex. 45. It is tracked, where there is no section-final cadence on *d*, as far as *d* in descent.

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[148] 286 H1a is exceptional in cadencing quite emphatically on *G*: by itself this section would surely be interpreted as an exposition of 24. pençgâh or 48. rast; and it may be noted that H1b further delays arrival at *A* by cadencing on *B*𝄳.

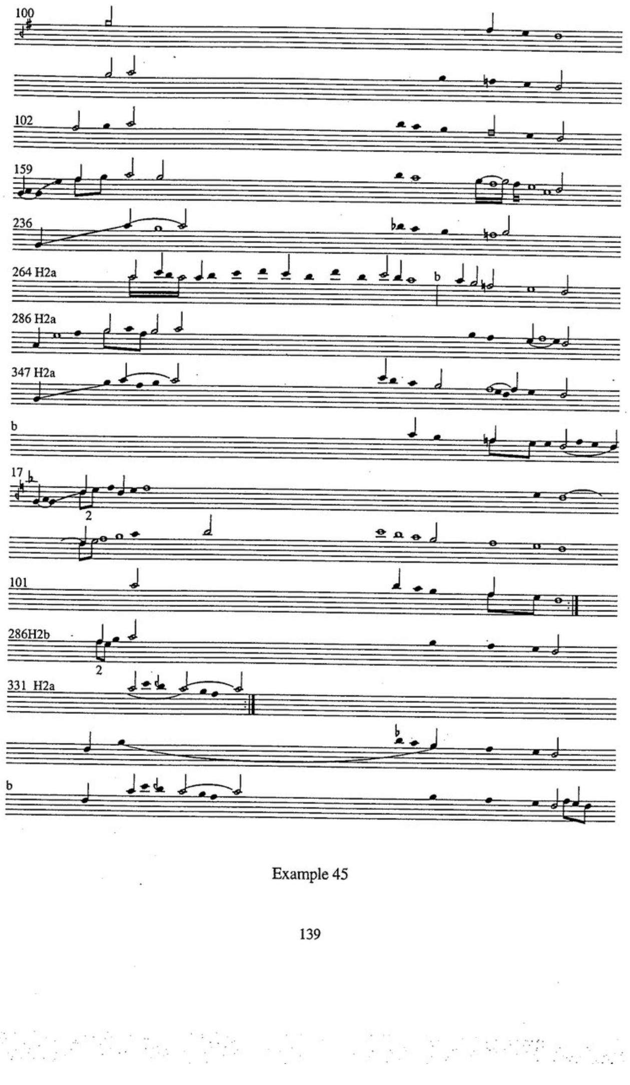
[149] It may be initial (102, 236, 286 H1a and b) or preceded by an ascent from *c* (100, 101), B𝄳 (159, 296, 331) or *A*, which will then itself either be initial (17 M, 58) or preceded by a descent from *c* (347) or, in a large-scale sequence, from *f* (17 H1, 236 Ma). Finally, further variation is provided by 264 and 286 H1c: in the former *e* is initial and prominent, and *d* is approached by a descent from *f*, while in the latter there is an initial *B*𝄳 - *e* jump, so that *d* again only appears in descent.

[150] 58 M, 100 H1b, c, 101 H1 b, 102 H1b, 159 Ma, 264 H1b, M, 331 Ma, 347, H1b, M.

[151] 58 contains a passage rising to *g* in which *f*♯ is sharpened to *f*𝄰, while an equivalent passage in 264 M has *f* (explicable, however, as an amplification of the preceding *e f e* flexure with which, like H1, M begins).

[152] But additionally in H1 (= M) c in 101 and Mb in 159 and 331. A contour similar to that presented in ex. 45 is also encountered in 102 H3a.

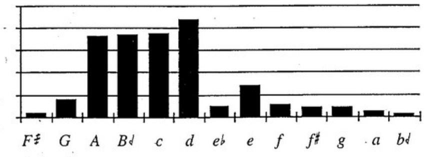
[153] In two of the pieces hitherto using only *f*, 17 and 331, we find, rather, *f* and *b*♭, but this does not constitute a standard pairing between registers, for in 100 and 236, two further such pieces, we find the *f*♯*/b*𝄳 pitch set (while the *f/b*♭ pitch set also occurs with 286 and 101, in which *f*♯ had previously predominated). Both sets occur separately in 101 (in H1c and H2), while the incomplete H2 of 236 switches from one to the other half way through, and 331 exhibits, beside the *f/b*♭ set, a composite with *f* and *b*𝄳, a combination that also occurs elsewhere when *f* is substituted for *f*♯ in descent.



Example 45

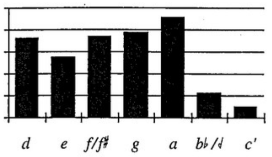
After the high register excursion most pieces remain in beyati, although there is a scattering of modulation in H3.[154] However, no particular pattern can be detected, unless one can define as such the striking absence of any modulation into the hicaz/şehnaz area, which occurs with such frequency elsewhere.

The following display of relative duration relates to all the material in H1 and M. *F♯* is subsumed under *F𝄲* and *b♭* under *b𝄳*, and *c'* (two time units in 101) is omitted, so that we have:[155]



Evident from this is not merely the overwhelming importance of the core *A* - *d* tetrachord, which accounts for 77% of the total, but also, in contrast, the very low number of time units occupied by the characteristic *e♭* of beyati and its relatively lower salience when compared with *e*.

The following is a display of relative duration for the material of which ex. 45 provides an abstract. Given their apparent equivalence, the figures for *f* and *f♯* and *b♭* and *b𝄳* have been aggregated, so that we have:[156]



Comparison between this and the corresponding display for the high register material in saba shows that the general similarity in the profiles of exs. 43 and 45 masks considerable differences in emphasis within the upper registers of the two modes. These concern not so much the notes above *a* since, as has been seen, the saba display is here skewed by one atypical piece which gives particular prominence to them, but rather the profile of the area up to and including *a*. In saba we encounter a more pronounced peak on *a*, while in beyati, despite it again being the most salient note, there is a much more even spread over the *d* - *a* pentachord, comparable to that for the *A* - *d* tetrachord in the preceding exposition. (In saba, in contrast, *d* almost vanishes.)

2.2.5 *The buselik group*

In several of the above discussions attention has been drawn to relationships between modes, so that to move now to an examination of pairs or larger groups of modes is a change of degree rather than of principle. The justification lies, in some cases, in the use of the same pitch set, in others in an evidently derivational relationship to which the modal nomenclature itself points. An example of this latter category is presented by the first pair, made up of buselik and buselik aşirani, while the set they form along with huzi aşiran exemplifies the former.

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[154] In 159 H3 *e* is far more prominent than *d*, even if reassignment seems unnecessary. 100 H3b, however, may reasonably be assigned to 11. bestenigar, while 102 H3a hints at 45. segâh, as does, more strongly, 286, where H3a and b are reminiscent of H1b and also cadence on *B𝄳*. In 331 H3a the core *A* - *d* tetrachord of beyati predominates, but also present is an element not encountered elsewhere, the unusual descending figure *G F♯ G F D E*; and in 347 H3a may be assigned to 44. eviç (although it is repeated in H3b with a cadence on *e* rather than *f♯*).

[155] The breakdown for each piece is:

	F𝄲	*G*	*A*	*B𝄳*	*c*	*d*	*e♭*	*e*	*f*	*f♯*	*g*	*a*	*b𝄳*
17	2	9	32	29	36	41	4	13	9	0	1	0	0
58	0	2.5	24.5	28.5	25	27.5	2	6.5	1	1.5	1	0	0
100	0	7	22	43.5	50.5	45	9	9	6	0	0	0	0
101	0	0	33	37	40	36	6	5	3	9	9	7	5
102	0	6	38	30	24	29	1	8	4	0	0	0	0
159	0	3	21	25.5	18.5	28	0	17	1	13	12	5	0
236	0	1	20	21	18	24.5	3	5.5	3	0	0	0	0
264	0	0	15.5	15.5	15.5	33.5	7	24	8	0	1	0	0
286	8	20	28	20.5	14	27.5	0	15	2	7	5	0	0
331	0	1	16.5	7	11.5	16	3.75	0.25	3.5	0	4	3.5	1
347	4	11	22.5	20.5	28	23	0	2	0	1	0	0	0
	14	60.5	273	278	281	331	35.75	105.25	40.5	31.5	33	15.5	6

[156] The breakdown for each piece is:

	d	*e*	*f/f♯*	*g*	*a*	*b♭/b𝄳*	*c'*
17	10	12	12	6	4	4	2
58	1	1	2	3	8	1	0
100	6	2	3	13	4	0	0
101	7	6	6	8	15	7	2
102	7	6	12	5	12	2	0
159	13	9	14	20	10	1	0
264	2	2.5	3.5	3	13.5	5	4.5
286	8	7.5	11.5	11	8	0	0
331	9.25	3	3.75	5	12.25	1.25	0.5
347	10.5	6.5	8	4.5	6.5	1	1
	73.75	55.5	75.75	78.5	93.25	22.25	10

27. buselik

The following pieces are in this mode:

16, 117, 161, 262, 263, 334, 335, 349

and it is also exemplified in 296.

28. buselik aşirani

The following pieces are in this mode:

110, 113, 114, 200, 271, 279[157]

and it is also exemplified in 296.

As with 25. saba and 26. beyati, the name buselik designates a particular and characteristic scale degree, in this case the secondary note *B*. But there the resemblance stops, for whereas *d*♭ in saba and *e*♭ in beyati had to compete with *d* and *e* respectively, were frequently the less common member of the pair, and sometimes failed to appear at all, in buselik and buselik aşirani *B* has no competitor. For Cantemir buselik is of the same category as 18. hisar, that consisting of descending (*tizden nerme*) makams that use secondary notes, although after defining the characteristic *B* his description (pp. 40-1) gives the apparently perverse nuclear definition of an ascent consisting of initial *A* followed by *B* and *c*. The expansion also begins with the potential range in ascent: from *B*, extending on main notes as far as *e'* (which implies, therefore, a lack of repetition at the octave, *b*𝄳 appearing in place of *b*), with melodic movement like that of 58. hüseyni (which implies that *e* was prominent).[158] Descent follows the same course down to the finalis, *A*. If the lower register is to be explored there is again a resemblance to hüseyni, with a potential descent to *D* followed by a return to finalis *A*. Cantemir then states, in a formulation that will reappear in the description of 35. acem, that buselik has not one finalis but two: *A*, for buselik proper, and *E*, aşiran, from which the terkib buselik aşiran takes its name.[159] This suggests that there is no significant difference between the two apart from the identity of the finalis (and the nature of the associated cadence material), and this is confirmed in the brief separate description of buselik aşirani (p. 52), which states that in both high and low registers its melodic movement resembles that of buselik.

Both modes are exemplified in 296, where they are separated by 12. büzürk which, like buselik aşirani, adds *F*♯, *E* and *D* below the pitch set of buselik. In addition to distinguishing the appropriate finalis, *A* in buselik and *E* in the other two, these necessarily compressed presentations suggest other differences too: in buselik *e* and *d* are more prominent, in büzürk *A* and *G*, and in buselik aşirani *B* and *A*. But on the wider canvas of a full length piece such contrasts, at least between buselik and buselik aşirani, are effaced. Indeed, as exs. 46 (for the former) and 47 (for the latter) make clear, for the greater part of the exposition, in conformity with Cantemir's account, the general profile of melodic development is the same in both, and approximates to the common ternary pattern: in most cases there is an initial ascent (or jump), usually from *A*, to *e*, which is elaborated (p)—the domain of elaboration encompassing more frequently the tetrachord above than that below—and a following descent to *A* (q) in which *d*, *c* and *A* may be elaborated. It is possibly here that the two begin to diverge, for the pieces in buselik aşirani exhibit a lower level of elaboration in the area of *c*, but it is in the cadential area (r) that divergence becomes definite and obvious.

As before, the abstracts only cover the material up to the first cadence.[160] Among the buselik aşirani pieces 110 is in a cycle not yet encountered, the compound zencir. However, the prominent nodes in this cycle simply coincide with those in its component parts (düyek, fahte, çenber, devr-i kebir and berefşan).

In ex. 46 two pieces stand out as unusual in their opening strategies: 334, which gives initial prominence to *g*,[161] and 335, which favours *c*. The latter is by Cantemir, and it is interesting to note that 279 in buselik aşirani, which is also by him, likewise begins with elaboration of *c*. What is not clear is whether this is best interpreted as a simple case of personal predilection or, conceivably, as indicative of a trend towards emphasizing a triadic *A c e* base: certainly the atypical use of *G*𝄲 as a leading note in the cadence of 335 prefigures later norms.[162] But support for the view that the initial emphasis on *c* is more likely to be simply a matter of compositional preference for one among a number of possible opening strategies may be drawn from the parallel opening of 200 Ma and, in particular, the precedent supplied by 114, an earlier piece recorded by 'Alī Ufḳī in which Ma begins *c B c B c* with exactly the same rhythmic configuration as the *c d c d c* of Cantemir's 279 H1.

In buselik much of the remaining material preceding development of the higher register could be mapped without difficulty onto ex. 46, even if in some cases, such as 349 M, the amount of material involved is such that multiple reentries at various points would be required. Particularly striking is the emphasis, in 161 H1b and Ma and 262 Ma and 334 Ma, on elaboration of the *e d* area.[163]

It may also be noted that as well as 334 Mb, 335 Ma has an initial descent from *g* (as do, after the higher register, 16 Z and 335 Z), thus providing evidence to suggest that although 334 is the only piece to begin H1 in this way it may not after all have been particularly exceptional, especially given the general family resemblance, shared by all except 335 Z, of a

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[157] Feldman, op. cit., provides a transcription of 112 (p. 383), and a transcription and extensive discussion of 279 (pp. 384-91).

[158] کندو پرده سندن تیزه وارنجه تمام پرده لر ایله تیز حسینی پرده سنه دك صرف حسینی کبی حرکت ایلمك حکم واردر.

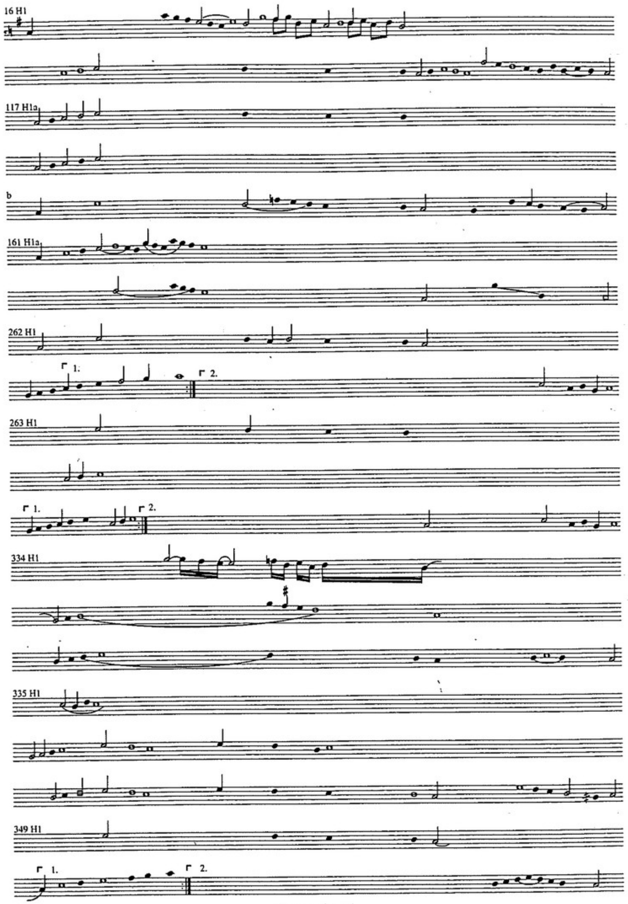
[159] مقام مرقومك ایکه قرارکاهی واردر ، بری دوکاه پرده سی که صرف بوسلك مقامنی اجرا ایدر ، بری دخی عشیران پرده سیدر ، که پرده ء مزکور ده قرار قلدقده مقام نامی ایله مشهور اولان بوسلك عشیرانی دیدکلری ترکب پیدا اولنور .

[160] In buselik this occurs in H1a in 161 and in all other cases at the end of H1, and in buselik aşirani already in H1 1 in 114, in H1a in 279, at the end of H1 in 113, 200 and 271, but not until the end of Ma in 110.

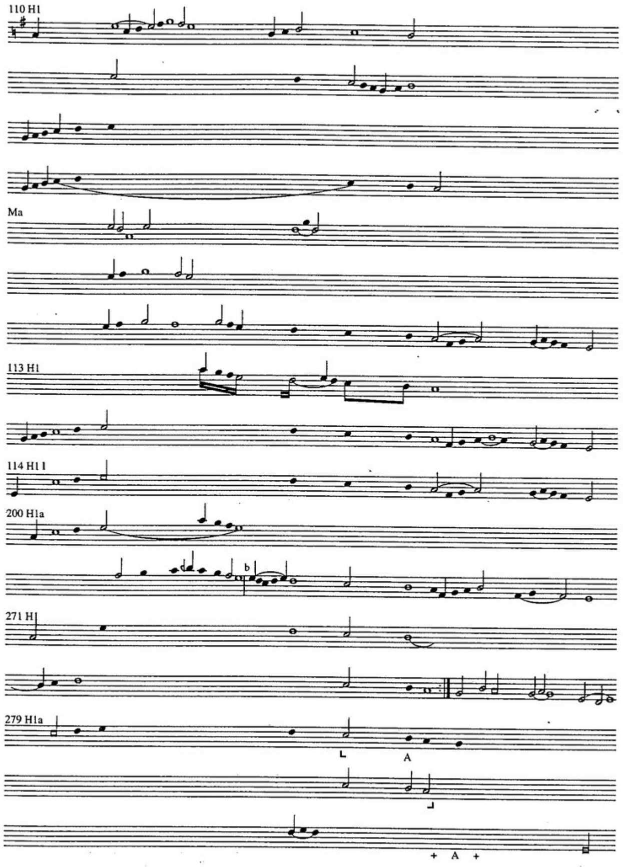
[161] In ex. 47 the beginning descent from *a* in 113 may be viewed as an inversion of an ascent from *A*.

[162] One may also note as possibly atypical of seventeenth-century practice the omission from Cantemir's 279 of *F*♯ in the buselik aşirani cadence, even if both the *G* - *E* jump and the *E F E* flexure it contains also appear in 271.

[163] In relation to 117 it should be remarked that the material under consideration properly comprises the rest of the piece, for there is no modulation and no high register development (H2 rises to *a*, but in the context of elaboration of *e*): M may be viewed as a vast elaboration of q: *e* is prominent in Ma, *d* in Mb, *B* and then *A* in Mc, while H3a elaborates the *c d e* ascent and H3b the *e* - *A* descent. Other points to note are that 334 H2a begins with a descent from *a*, while 161 Mb is made up of a sequential elaboration of *a g f*♯ *e d*.

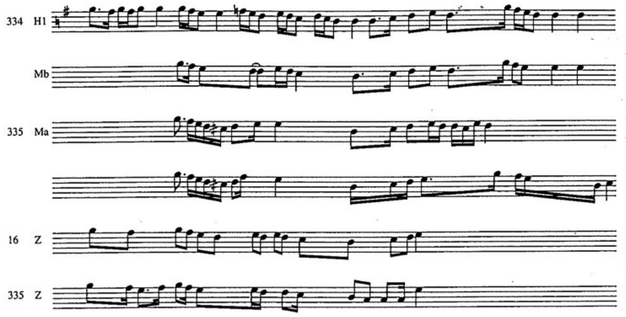


Example 46



Example 47

descent to *B* followed by an ascent to *d* or *e*:



Example 48

What does appear exceptional, in contrast, is the prominence given to *G* in 16 M, which also provides the only example in buselik of the lower notes *F♯* and *E*.

In every case except one, 349 H2, exploration of the upper register[164] involves only main notes, i.e. we encounter *b𝄬* rather than *b*, and although in broad terms the melodic development is typologically similar to that exhibited in exs. 43 and 45, with an optional initial rising scale followed by a rising-falling arch shape within which *a* tends to be prominent, there is not quite the same degree of similarity between the different pieces, so that it is less easy to make a case for a simple formulaic structure associated particularly with buselik. In 349 H2, in contrast, we encounter *f♯* in place of *f𝄰*, marking a modulation into 23. mahur (although at one point, oddly, the two are juxtaposed). Other modulations occur, as expected, in H3, but do not suggest any particular pattern and are, indeed, not at all easy to define.[165] In contrast, none of the material reverting to buselik after a modulation or resuming the lower register after a high register passage contains anything untoward.[166]

In buselik aşirani it is equally the case that much of the remaining material preceding development of the higher register[167] could be mapped without difficulty onto ex. 47. Given that the finalis in buselik aşirani is lower and, consequently, that there is a greater distance to be covered in descent, it might be anticipated that the following passages in the higher register would be shorter than in buselik. But in the event their average length is rather longer.[168] One of the more extended occurs in 271, where the melodic line rises to *e'* and, unusually, the upper octave equivalent of *B* is retained:[169] elsewhere, as in the upper register of buselik, this is replaced by *b𝄬*, and we again find that the normal course of events is for there to be an underlying arch form, melodic development being centred around *g* and *a* and then descending. If the descent does not continue down to *A* and the following cadential area, the (sub)section will normally have finalis *e*.

The most extensive explorations of the upper register are provided by 114 and 279. In the former it is resumed in H3, which nevertheless confines itself like H2 to the *d* - *a* pentachord.[170] 279 offers considerably greater complexity: the upper register is explored already towards the end of H1; in M two of the five subdivisions of what is an extremely long section present elaborations of an *a* → *e* descent; and H2a proceeds to develop further the area around *a*, while H2b shifts the emphasis to *g*. 279 offers, in addition, modulatory complexity,[171] but although instances of hicaz and hicaz-related modes appear here and also in 271 there is insufficient evidence to conclude that to have recourse to them was a standard convention.[172]

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[164] Which occurs otherwise in H2 in 16, 161, 262, 263, 334 (H2b) and 335; and in 161 H3.

[165] Cantemir lists no modulatory family for buselik, but this is not necessarily indicative of a comparatively low incidence of modulation. 16 H3 might possibly be hüseyni-buselik, but could just as easily be buselik; 334 H3a introduces *e♭* alternating with *e*, reminiscent therefore of 26. beyati, but not to be identified with it: it bears little melodic resemblance and fails to replace *B* with *B𝄬*. A similarly obscure passage occurs in 335 H3a, which again includes *e♭*. The remaining pitches are *G♯ A B c*, which by themselves suggest if anything a transposition of 1. hüzzam. H3b begins in the same vein and then produces the unusual note sequence *B c e♭ e f♯ e d♯ e*, but instead of marking the onset of a modulation to 18. hisar the *e d♯ e* flexure may be regarded as cadential, and what follows, including also the first cycle of H3c, is rather in mahur (the beginning of the following ascent, incidentally, *d♯ e f♯ g*, has the same intervallic structure, 1 2♭ 3♭ 3, as the beginning of H3a).

[166] The material in question consists of 16 Z (and possibly H3), 262 and 263 H3, 334 H3b, 335 Z and H3c (349 is incomplete).

[167] Which consists of 113 Ma, 114 H1 2 and M, 200 M and H2a, 271 M and 279 H1b and c. However, 113 Ma is somewhat transitional as to register: although not going beyond the *e* - *a* tetrachord, it accords *g* more prominence than would be expected in an elaboration of *e*. With regard to the remainder, it may be noted that 114 Ma is an extended elaboration of the *c d e* ascent, that 200 M gives the cadential material twice, with slight variations, and that 279 H1b follows H1a in consisting of an elaboration of *c* (followed by an *e* - *A* descent), so that it is not until H1c that the dominant pattern of elaboration of *e* appears (followed here by a descent to *E* before pre-cadential *A* is reached).

[168] They consist of H2 in 110, 114, 200, 271, and 279; and in addition of 110 Mb, 114 Z and H3.

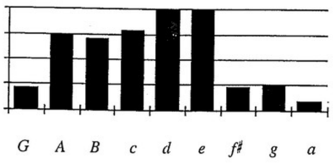
[169] Which suggests that in might be preferable to regard H2b at least, which begins from *a*, touches *e'* in ascent, and descends to finalis *e*, less as a development of the higher register *per se* than as a transposition up an octave of the basic *A*→*e*→*E* contour of the exposition.

[170] H2 initially emphasizes *g* while H3 begins by repeating an ascending formula ending first on *g* and then on *a*. Both are followed by Z, which begins by ascending to *a* and then descends to *A* and the cadence area.

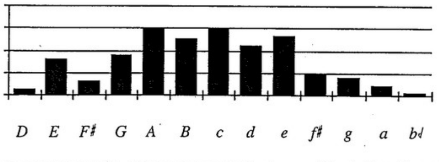
[171] Already in 279 Ma the insistence on *f𝄰* strongly suggests 44. eviç. Mb also veers between buselik aşirani and eviç, but ends with a brief excursion into what appears to be 30. hicaz but is then established in Mc as, rather, 31. uzzal by the initial emphasis on *e*. Me introduces the flexure *A B♭ A* in a sequential context as if alluding to 40. ırak or, possibly, given the continuation of the descent to *E*, 20. nühüft. H2a 2 introduces a modulatory *b♭*, while H3 proceeds to develop the 1 2♯ 3 4 hicaz tetrachord first in the lower register, on *E* (this passage seems, ironically, to conform more closely to Cantemir's description of 32. zengüle than does the one composition in this mode), and then an octave higher, suggesting first 33. şehnaz and then 18. hisar. In such modulations one would also expect the substitution of *B𝄬* for the *B* of buselik aşirani, but in 279 H3 there is no exemplification of this pitch area (the first appearance of *B*, in H3c, can reasonably be interpreted as signalling the beginning of the return to buselik aşirani).

It should also be noted that not all the sections which return to the main register of buselik aşirani after either a high register passage or a modulation[173] conform to the norms suggested by ex. 47. 200 H3a is unusual in concentrating on the lower *E* - *A* tetrachord (followed in H3b by a repeat of the double statement of the cadence already noted in Mb), while 279 Md jumps from *e* to *B* and then concentrates on the lower *A* *B* *c* segment of the core pentachord.

The following display of relative duration for buselik includes all the material in H1 and M. *G‡* is subsumed under *G*, *c‡* under *c*, and *f* under *f♯*. *E* (one time unit in 16), *F‡* (two time units in 16) and *b𝄳* (two time units in 335) are omitted, so that we have:[174]



The parallel display for buselik aşirani likewise includes all the material in H1 and M.[175] *F* is subsumed under *F♯*, *G‡* under *G*, *B♭* under *B* and *f* under *f♯*, so that we have:[176]



The main contrast between the areas common to the two profiles is thus the reduction in the percentages for *d* and *e* in buselik aşirani (the difference corresponding in fact fairly closely to the values for the lower notes below *G*), so that there is now a more even spread over the *G* - *e* span and, consonant with the extension of the range downwards, a tendency for *A*, *B* and *c* to slightly outweigh *d* and *e* as the area to which greater emphasis is now accorded.

29. *huzi aşiran*

There is just one piece in this mode, 112, and it could be argued that it should not be accorded separate status but included within the buselik aşirani corpus. Although evidently standing, or presumed to stand, in the same or a similar relationship to huzi as buselik aşirani to buselik, the precise nature of that relationship cannot be explored as no example of huzi is included in the collection. Nor is it described by Cantemir, who mentions it only (p. 27) as one of the 'unused' terkibs related to dügâh, so that the most we can deduce is that it had, like buselik, *A* as finalis. But huzi aşiran is not simply another example of a mode with finalis *E* derived from one with finalis *A*: it is also evidently a member of the buselik family characterized, like the other two, by the use of the secondary note *B* in place of *B𝄳*. In fact, the relationship between it and buselik aşirani was sufficiently close for 112 to be assigned by ʻAlī Ufḳī to buselik aşirani (or, in his terminology, aşiran-buselik) and, likewise, not to be listed with a separate index heading by Cantemir but to be entered under the rubric of buselik aşirani.[177] Indeed, although Cantemir at least recognizes the existence of huzi, he fails to mention huzi aşiran: rather, he includes among the terkibs a certain huzi buselik (p. 53) which, it may be suggested, is synonymous with huzi aşiran: his account, which gives the

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[172] 271 H3 likewise begins with the hicaz tetrachord in the lower register. It then passes to the higher via the *d‡* of hisar, but in H3c and d would seem to be better described in terms of şehnaz, except that we find throughout in the extensive higher register *b* instead of the expected *b𝄳*, thus retaining in a new modal context the innovation already noted in H2 whereby *b* is also preferred to *b𝄳* in the upper register of buselik aşirani itself. The modulation in 110 H3 is more readily definable, being in 38. acem-buselik, but not so that in 113 Mb, assuming that it really does constitute a modulation: it begins with the flexure *b𝄳* *b* *b𝄳* followed by a brief descent which is then repeated with initial *b♭*.

[173] 113 H2 and H3, 200 H3 and 279 Md, e and H3c.

[174] The breakdown for the individual pieces is as follows (counting both prima and seconda versions of 334 Ma):

	G	*A*	*B*	*c*	*d*	*e*	*f♯*	*g*	*a*
16	19	33	31	27	28	18	9	7	1
117	6.5	28	24	22	29	36.5	5	2	1
262	7	21	13	15	21	24	3	2	2
263	7	15	18	25	13	15	3	0	0
334	0	28	19.5	18.5	54.5	39	13	17.5	2
335	6	22	35	53	68	67	16	27	12
349	5	31	24.5	23	20	30.5	5	2.5	2.5
	50.5	172	165	183.5	233.5	230	54	58	20.5

[175] Omitting the modulations in 113 Mb and 279 Ma, b and c.

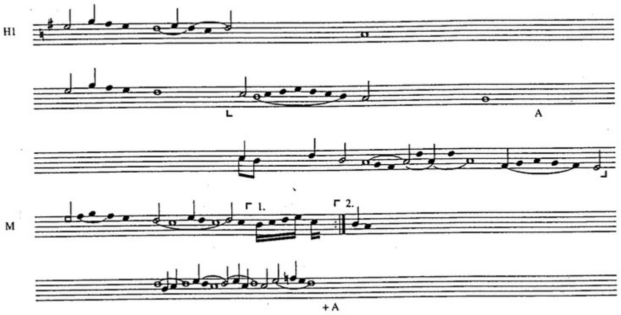
[176] The breakdown for the individual pieces is as follows:

	D	*E*	*F♯*	*G*	*A*	*B*	*c*	*d*	*e*	*f♯*	*g*	*a*	*b𝄳*
110	0	8	4	11	22.5	13.5	11	19	34	19	20	14	4
113	0	8	6	9	13	9	6	8	15.5	10.5	8.5	2.5	0
114	0	13	7	13	17	8	16	19	25	7	3	0	0
200	0	10	10.5	6.5	9.5	15	12.5	8.5	13	4	3.5	2	1
271	6	21	3	50	65	60	77	44	30	4	0	0	0
279	7	28	4.5	11	41.5	33	41	22	28.5	10	8	5	0.5
	13	88	35	100.5	168.5	138.5	163.5	120.5	146	54.5	43	23.5	5.5

[177] In the first index (p. 113) it is included among the 'unknown' pieces, its format suggesting that huzi aşiran could be understood as a title. Similarly in the third index (p. 139), where it is entered as huzi in the buselik aşirani list.

initial as *e*, describes the beginning as the same as that of 58. hüseyni, and then states that it descends via *B* to the finalis, *E*,[178] accords almost exactly with the exemplification provided by 112.

It is thus conceivable that the fact that in 112 *e* is not only the most prominent note in the first stage of the exposition, as in buselik aşirani, but also the initial, could be not random but a marker of modal differentiation. But it is unlikely: in buselik aşirani 110 M begins with *e*, and even if there is no example of an H1 with initial *e* it is difficult not to consider 113 as effectively equivalent (and it must be assumed that it was precisely because of the initial motivic similarity between 112 and 113 that Cantemir juxtaposed them). A rather more significant difference becomes apparent when the material in 112 H1 and M is displayed exactly as in ex. 47:



Example 49

Evident from this is that although *e* is certainly prominent initially, 112 places greater weight thereafter on elaborating the area around *d* and, significantly, the rhythmically formulaic figure (in H1 7) isolating two prominent notes has *d* rather *e* in combination with *A*. A similar change of emphasis occurs in M, where *d* assumes equal and, subsequently, greater prominence. H2, on the other hand, provides no evidence whatsoever of modal differentiation, for the simple reason that much of it is identical with H2 and Z in one of the buselik aşirani pieces, 114, as may be seen from ex. 50. Nor does H3, which returns to the lower register and starts by elaborating the *G* - *B* area in a manner very similar to that of the beginning of 16 M (in buselik).

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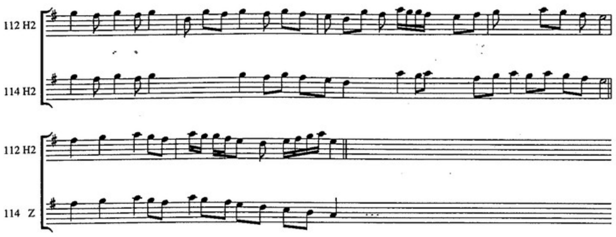
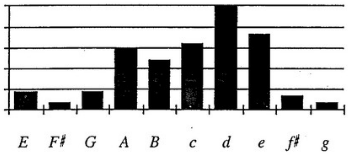
[178] خزی بوسلك حسینی پرده سندن حرکت ایدوب ابتدا تمام حسینی مقامك اغازه سنی کوسترر آندن بوسلك پرده سی ایله اشاغه اینوب عشیران پرده سنده قرار قلر .



Example 50

In the display of relative duration *f* (which appears twice in an *e f e* flexure) is subsumed under *f♯*, so that we have:[179]



Compared with the figures for buselik aşirani one difference stands out as unlikely to be a random variation: the 25% figure for *d* is more than twice the 11% in buselik aşirani, and this markedly greater salience, reflecting the higher level of prominence noted above, is, on the basis of the evidence available, likely to be the main justification for 112 having at some stage during the latter half of the seventeenth century been judged a suitable candidate for transfer (whether real or merely potential) to a separate modal category.

In the light of this difference one may with some confidence assign the fragmentary and untitled 352 to buselik aşirani rather than huzi aşiran. Even if only two complete cycles are available for scrutiny it is clear, both in terms of duration and position within the rhythmic cycle, that *e* and, secondarily, *c* are prominent while *d* is decidedly not.

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[179] The breakdown for the individual sections is:

	E	*F♯*	*G*	*A*	*B*	*c*	*d*	*e*	*f♯*	g
H1	4	1.5	4	14	9	6	12	10.5	2	1
M	4	1.5	4	13	14	24.5	36	24.5	4.5	2
	8	3	8	27	23	30.5	48	35	6.5	3

2.2.6 *The hicaz group*

The next group to be considered is considerably larger, consisting of all the remaining modes that are characterized by the inclusion of the hicaz tetrachord (1 2↑ 3 4). It comprises, in addition to hicaz itself, nigriz, şehnaz, uzzal and zengüle.

30. hicaz

The following pieces are in this mode:

220, 255, 350

and it is also exemplified in 296.

Although one of the most common modes to appear elsewhere in contrastive modulations, hicaz is not particular well represented by pieces in which it is the main mode, especially as one of the three, 350, is fragmentary. All the examples, it may be noted, are anonymous, and it would appear, especially in the light of the fact that there is no hicaz section in ʻAlī Ufḳī's collection, that it was only just re-emerging from a period of marginalization during which, having lost ground to its two most closely-related neighbours, 31. uzzal and 33. şehnaz, it had in effect been relegated to the status of those terkibs that made fleeting appearances in modulation sections and had not yet sufficiently re-established itself as a possible main mode of a piece for its potential to attract the attention of any of the leading composers of the latter half of the seventeenth century. As complete pieces need to venture further afield than the narrow confines of the core that suffices for identification in modulations, it is tempting to think of the lack of unanimity which the available material exhibits in the upper register as at least consonant with such an interpretation. But more cannot be claimed, for such variability may also be encountered in quite well-established modes (including, for example, uzzal).

Nevertheless, that the status of hicaz towards the end of the seventeenth century was still subordinate is confirmed by Cantemir, who classes it as a terkib and accords it only a brief description (p. 51) which is mainly concerned to indicate how it may be differentiated from the evidently more important uzzal. It is said to begin from *d*, proceed like uzzal, and have the same finalis, *A*, the means of providing some limited degree of independence being the optional use of *f* in the upper register.[180] While this point is certainly of relevance to the notated repertoire, it is somewhat secondary: indeed, the inclusion of *f*, Cantemir's wording implies, was not obligatory, and it duly fails to appear in the exemplification offered in 296: more significant is the differing identity of the most prominent note (apart from the finalis), which is *d* in hicaz but, as will be seen below, *e* in uzzal.

Given the reduced amount of material available, the abstract in ex. 51 can revert to fuller coverage and include both H1 and M in 220 and 255, and all there is of 350.

Apparent in 220 and 255 is a form of exposition consisting of two core elements: elaboration of the prominent *d* and a following descent to *A*; and two optional ones: a preceding ascent and a following cadential elaboration involving a repeat descent. 350, however, differs markedly—although with such a small sample it can hardly on that basis be stigmatized as atypical—in attaching initial importance to *A* and, rather more puzzling, then

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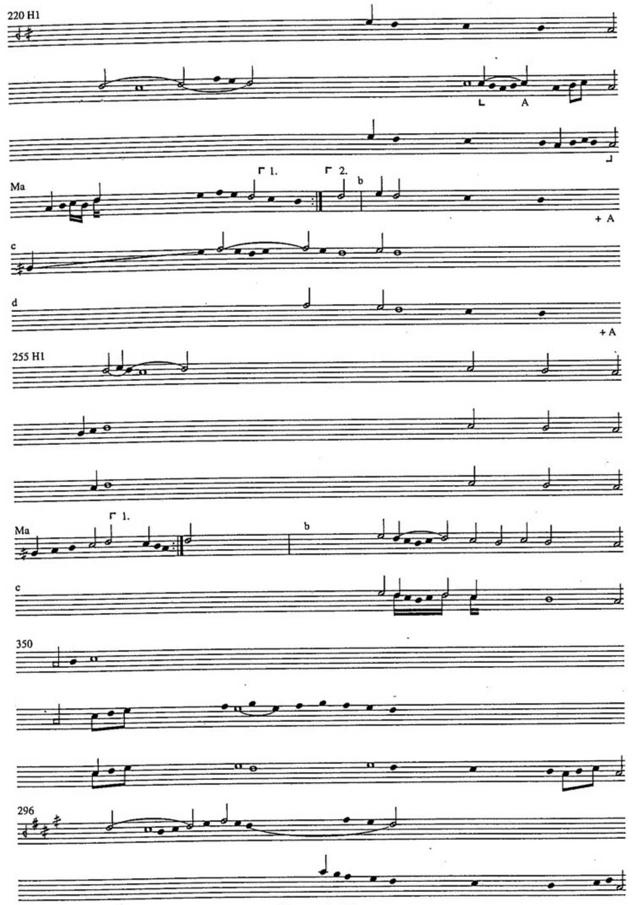
[180] ومحصوص عجم پرده سیله تیز پرده لرده حرکت ایدر ایسه عزال مقامدن بر آز فرق ایده بلور.



Example 51

proceeding to emphasize *e* rather than *d* (even if *d* is finalis in the one section marked as complete). This suggests that 350 might have been more akin, at least in its initial stages, to uzzal, and it is possible that the principal reason it was assigned to hicaz is not the fleeting appearance of *f* but the fact that it fails to include what seems to be a mandatory feature of the exposition of uzzal, that is, exploration of the upper register up to *a*.

From the sample provided, it appears that the core pitch set of hicaz consisted essentially of the hicaz tetrachord on *A*, with *G‡* below and *e* above: *G‡ A B𝄳 c‡ d e*. *G‡* (zirgüle) functions mainly as a leading note.[181] Above *e* we encounter in the standard exposition area of H1 and M both *f* and *f♯*, but rather than *f* being, as Cantemir seems to suggest, merely optional, the two occur in complementary distribution: *f*, the highest note in 255, appears in the flexure *e f e* and in standard elaborations of *d* such as *d f e d*, while *f♯*, which occurs in 220 and 350, carries melodic emphasis and/or appears in the context of *g*, the highest note.

It is in H2 of 220 and 255, in conjunction with which may be considered the example of hicaz in 296, that we encounter what has been termed lack of unanimity in the upper register. In 296 we are presented with a brief descending outline of the hicaz tetrachord on *e* (*e f♯ g‡ a*), and it is again this tetrachord that is developed, in a manner akin to şehnaz, in 220 H2 (where, however, the figure *e f♯ g f♯ e* is twice injected). In 255 H2a, on the other hand, apart from *f‡*,[182] only main notes occur (including also *c'* in place of *c‡'*), and the subsection ends with a cadence on *f♯*, suggestive of a modulation to 44. eviç. H2b proceeds to maintain the emphasis on *f♯*, which is both initial and finalis, but instead of establishing eviç it begins by veering towards şehnaz by including *g‡*, only to modulate elsewhere and thereby undermine any congruence with the other pieces.[183] Further modulations characterize H3a in 220,[184] while in 255 H3 marks a return to hicaz proper. Yet even here there is a lack of stability: as noted above, H3a introduces a variant with *G* in place of *G‡*, but *G‡* is reinstated in H3b, only to be accompanied by one more variation, a brief descent to *F♯*, hinting at the hicaz tetrachord on *E* and thence at the related mode 32. zengüle.

In the following display of relative duration, *g‡* (half a time unit in 296) is subsumed under *g* and *a* (one time unit in 296) is omitted:[185]

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[181] It will later be considered to provide a differentiation, marked by the name zirgüleli hicaz, between two forms of hicaz, the other, which is exemplified here only by 255 H3a, having instead *G*.

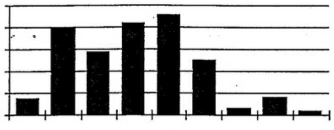
[182] Which occurs thrice in the rare flexure *f♯ f‡ f♯*.

[183] By substituting *e♯* for *e* (so that the pitch set of this subsection is the most unusual *e♯ f♯ g‡ a b𝄳*).

[184] It contains within the first cycle and a half a succinct but fully articulated presentation of the main elements of 16. ısfahan. This is repeated, but instead of the expected closure with a cadence on *A* there is a descent to *F♯* followed by a further two cycles, with finalis *F♯*, which represent another modulation, this time to 43. muhalif ırak.

[185] The breakdown for the individual pieces is as follows:

	G‡	*A*	*B𝄳*	*c‡*	*d*	*e*	*f*	*f♯*	*g*
220	5.5	32.5	24	31.5	32	16.5	2.5	9	0.5
255	4	22	21.5	32	29	9.5	2	0	0
350	4	13.5	5.5	9	10.5	17	0.5	2.5	1.5
296	0	4.5	2	4	12	3	0	3	0.5
	13.5	72.5	53	76.5	83.5	46	5	14.5	2.5



This profile most obviously underlines the importance of the core *A* - *d* tetrachord, which accounts for 77% of the available material. But a possibly more interesting general point relates to the incidence of *c‡*. Among the class of modes characterized by a secondary note an initial distinction may be drawn between on the one hand hicaz and modes such as 27. buselik in which the secondary note replaces a main note and, on the other, modes such as 25. saba and 26. beyati in which main and secondary notes alternate. In the latter group, as has been seen, the secondary member of the pair tends, paradoxically, to be at the same time significant and marginal; more precisely, if it occurs at all it is normally confined within a highly restricted context. In the former the secondary note lacks a competitor and, presumably as a result, is not restricted in the same way, but there are nevertheless interesting variations in incidence between the three modes in question: in 17. nihavent *B♭* is the least used note within the core pitch set; in buselik *B* is virtually on a par with *A* and *c*; and in hicaz *c‡* is as salient within the core tetrachord as *A* and *d*, and it is if anything the neighbouring main note *B𝄳* that tends to recede somewhat.

31. uzzal

The following pieces are in this mode:

15, 29, 118, 147, 148, 209, 211, 324, 333

and it is also exemplified in 296.

As with other modes characterized by a secondary note, Cantemir begins his account (pp. 39-40) of uzzal, which is categorized as a descending makam, by referring to the note in question, in this case the eponymous *c‡*. He then defines the structure of uzzal in terms of a rising and falling scale, beginning from *A* and proceeding *B𝄳 c‡ d e f♯ g* (or *g‡*) and then via *c‡'* up to *e'* and returning in the same way to the finalis, *A*; and he adds that if the lower register is required one can descend via either *G‡* or *G* to *C‡*[186] and return in the same way to *A*. An extensive family of modulatory possibilities is then given, the 'used' terkibs being named as 30. hicaz and, because of the way it begins, 16. ısfahan. These are followed by mention of the close transpositional relationships between uzzal and 33. şehnaz (in the upper register) and 32. zengüle (in the lower), after which the 'unused' terkibs are listed: nevruz, türki hicaz, nevruz-ı rumi, 1. hüzzam, zemzeme, nihavend-i kebir, bahr-i nazik, hicaz-ı muhalif and musikar.[187]

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[186] This note (*nerm uzzal*) does not form part of the gamut as originally defined by Cantemir. Like *C*, it would have to be produced on the lower-pitched second string on the tanbur.

From Cantemir's rather skeletal outline the main points to emerge are thus: an essentially rising-falling contour beginning and ending on *A*; the availability of a very wide compass, from *C*♯ to *e'*; and the identical alternatives in both high (*g* or *g*♯) and low (*G* or *G*♯) registers. There is, needless to say, only a partial fit between these and uzzal as displayed in the notated repertoire. In no more than one piece, for example, do we find an exploration of the lower register: otherwise, apart from *E* in 209, in any case interpretable as an inversion of *e*, the lowest note to appear is *G*♯, which functions as a leading note; and in only three pieces does the melody ascend from an initial *A*. There is, on the other hand, good evidence for the accuracy of Cantemir's observation about the *g*/*g*♯ alternative.[188] (The latter, it may be noted, appears only in pieces not included by ʻAlī Ufḳī, and may represent a later development.) But two significant features fail to receive a mention: the prominence of *e*, and the fact that it was evidently customary, even if not obligatory, for there to be an ascent to *a* at some stage after the initial elaboration of *e* in the exposition. This will either first appear in M, or recur there having already been introduced in H1.[189] It is reasonable to conclude that these two features were more important than the avoidance of *f* in marking off uzzal from hicaz.

In order to cover the ascent to *a* the abstract of the initial exposition given in ex. 52 is extended to M (in most cases complete) except for 15 and 324.[190] From this it is apparent that in no case is there a scalar ascent from an initial *A*, as implied by Cantemir: *B*𝄳 is always omitted, and in 147 and 209 there is a jump from *A* directly to *e*. *c*♯ may also be initial, but the most common strategy is to begin immediately with the prominent *e*, elaboration of which frequently develops first through the notes below, an immediate brief descent to *A* being common. After further elaboration of the area around *e* comes the ascent (or jump) to *a*, followed by a descent, during the course of which there may be further elaboration, again most commonly in the area of *e*, to *A*. The cadence area is in some cases an elaboration of the finalis, but in others it is integrated into the descent. The general nature of this contour is thus familar, and it would lend itself quite readily to ternary segmentation.

Given that the exposition goes as high as *a*, it might be anticipated that in H2 and H3 the range would be extended further, adding at least the *a* - *d'* tetrachord, and/or that variety

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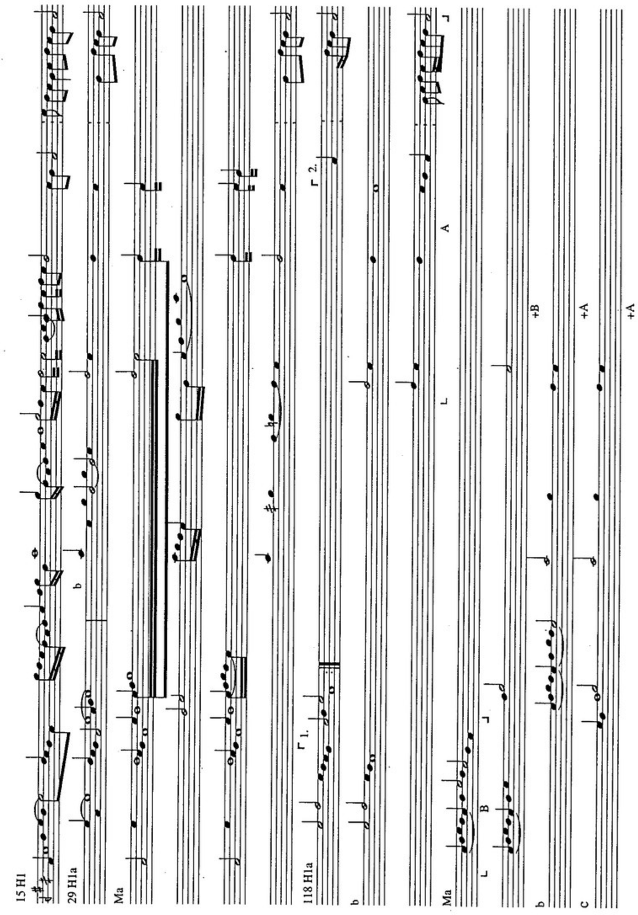
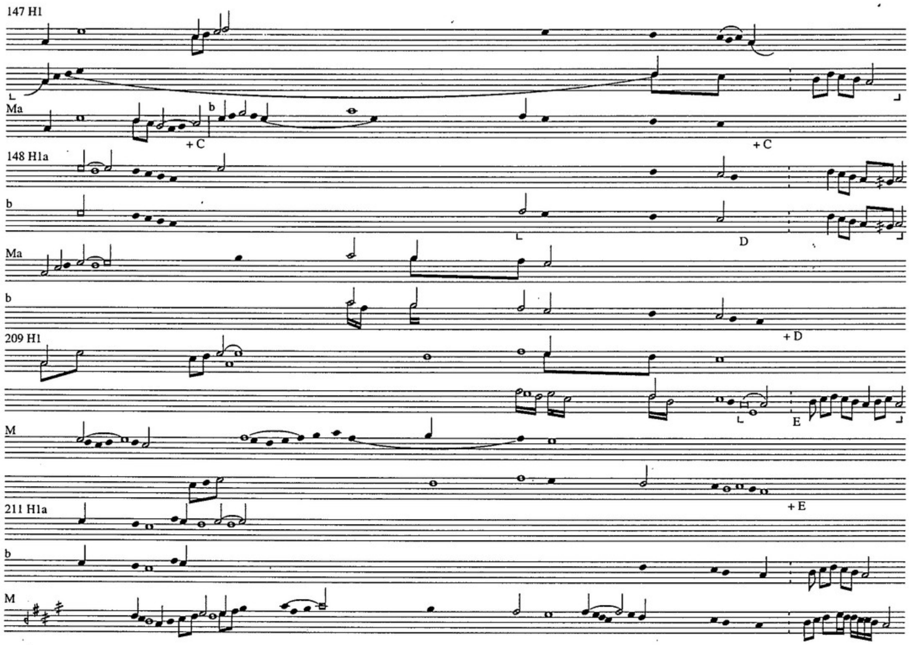
[187] Reasons are given in some cases, the passage as a whole being (with the original punctuation):
تراکب غیر مستعملدن بوکا تابع ، نوروز ، اپتدای حرکتی سببی ایله ترکی حجاز ، ونوروز رومی ، حزّام ، زمزم ، ادای قراری سببی
ایله نهاوند کبیر، اپتدا اغازه سی ایله ، بحر نازك ، واپتدا حرکتی سببی ایله ، حجاز مخالف ، واپتدا اغازه سی سببی ایله موسیقار .
But although it is obvious that with nihavend-i kebir it is the ending that is similar while in others it is the beginning, it is less easy to distinguish between the implications of the terms *ḥaraket* and *aġāze*: if anything the former might imply a slightly more extended span of melody than the latter, which might refer to little more than the initial note or opening formula. Nor, given Cantemir's punctuation, is it clear whether nevruz-i rumi is meant to be paired with türki hicaz or not.

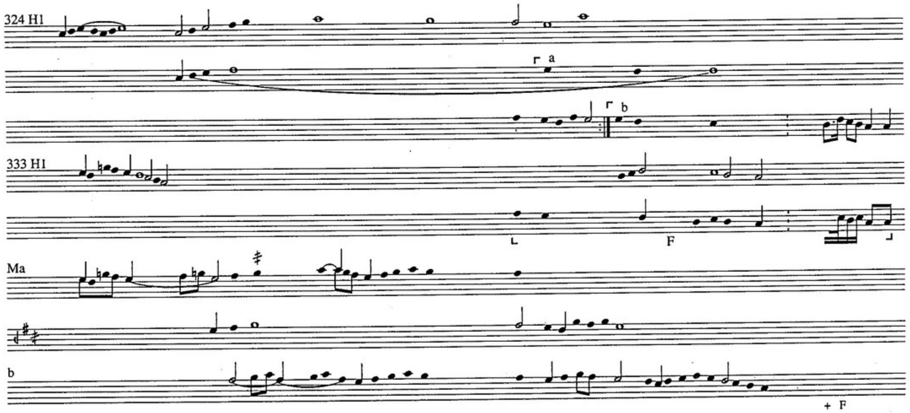
[188] The ascent to (and sometimes development of the area around) *a* is with *g* in 15, 29, 118, 147 and 209, with *g*♯ in 148, 211 and 324, and with both and 333.

[189] Only in the compressed exemplification of 296 is it omitted.

[190] In 29 *a* appears only fleetingly in H1 and greater weight is attached to the upper tetrachord in Ma, which is therefore included.




147 H1
Ma
b
+ C
+ C
148 H1a
b
D
Ma
b
+ D
209 H1
E
M
+ E
211 H1a
b
M


324 H1
a
b
333 H1
F
Ma
b
+ F

Example 52

would be sought through modulation. In 15 and 324, indeed, where the ascent to *a* occurs in H1, the question of differentiation presents itself already in M. But 15 delays fulfilment of such expectations: the strategy it adopts is, rather, one of small-scale changes of emphasis within the framework provided by H1, to the pitch stock of which are added only *G♯* (in M) and *b♭* (not until Z).[191] In 324, on the other hand, differentiation is more overt at an earlier stage.[192] Similar variations in approach also occur in the remaining pieces, where the ascent to *a* comes in M. In 211 there is an initial emphasis on *a* in H2 and the range is extended to *c′*, but there is no modulation.[193] 209 provides even less differentiation than 15,[194] but the contrastive possibilities of the switch from *g* in one (sub)section to *g♯* in another (or vice versa) are frequently exploited in the remaining pieces.[195]

The same switch appears in 29 H2a, although here both pitch set (*f♯ g♯ a b♭ c′*) and finalis (*f♯*) indicate a modulation. This and others[196] cannot readily be identified, but although they may possibly be members of the modulatory family listed by Cantemir (like 333 H3, equatable with 1. hüzzam), lurking among the 'unused' terkibs for which he fails to provide contemporary descriptions, there can be no guarantee that such is the case, for not all the remaining modulations are confined to the family: 148 H3b is in 27. buselik, 147 H3 and 333 H2 in 44. eviç. Indeed, of those listed by Cantemir only şehnaz occurs with any frequency, and while hicaz may perhaps be detected in 148 Mc, where *d* is prominent, and, conceivably, zengüle in 148 H3a, there is no trace whatsoever of ısfahan.

In the display of relative duration H1 and M are included for all pieces. *d♯* (one time unit in 148) is subsumed under *d*; and *E* (four time units in 209) is added to *e*. We therefore

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[191] Nevertheless, an impression of rising pitch (and concomitant intensification) is conveyed by beginning M on *e*, with a reprise of time units 5-8 of H1, and H2 on *g*, with a reprise of time units 19-30 of H1 (so that in terms of visual display each would start at a point further along the stave in ex. 50), while a different form of development is provided by the widening range of their scalar passages: *A - a - A* in M, *g - G♯ - e* in H2 and *c♯ - b♭ - A* in Z. But for at least half their length both H2 and Z consist of elaborations of the area around *e*, and the subtle variations they supply are matters of compositional technique rather than modal structure. It is not until H3, in fact, that more substantial contrasts appear: *g♯* replaces the previous *g*, and the upper *a - d′* tetrachord is explored: the whole can be analysed as a modulation into şehnaz.

[192] Whereas H1 had, prior to the final cadential descent, explored the area on both sides of *e* (from *c♯* to *a*), Ma confines itself almost exclusively to the *e - a* tetrachord (touching also on *b♭*), while Mb varies the same area by introducing *g* in descent alongside the already established *g♯*. The remaining sections are more abbreviated, concentrating on just one or two features each: H2 consists of little more than two ascending *A - a* scales; Z extends the upper register further to include also *c′*, but consists in essence of a descending scale followed by elaboration of the *A - d* tetrachord; and H3 plays with the *A - a - A* octave jump and then elaborates the *A - c♯* trichord.

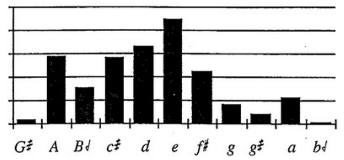
[193] Similarly in 148, where the range is extended upwards to *c♯′* in H2 and downwards to *E* in H3a, which explores, briefly, the lower register (but doing no more than virtually repeating H1a 1 an octave lower).

[194] H2 consists of a scalar ascent to *a* followed, however, by a (largely sequential) descent; Z concentrates on the core *A - e* pentachord; and H3 begins with a rising sequence (virtually identical with that in 15 Z) but goes no higher than *g* (and at no point is there a switch to *g♯*).

[195] 333 switches back and forth, 148 switches from *g♯* to *g* in H3c, while the switch from *g* to *g♯* occurs in 29 H3 and 118 H2a and d.

[196] 29 H2b (with final *F♯*) and 118, where H2a and d frame a modulation which is then almost exactly repeated in H3b and c, transposed down from *a* to *e*.

have:[197]



As might be expected, this profile is quite different to that for hicaz: *e* replaces *d* as the most salient note, and greater emphasis is placed on the tetrachord above. The notes above *e* account for 23% of the whole, but despite the more even spread *e* still has virtually the same percentage as the salient *d* in hicaz. The two profiles are remarkably similar in the total percentages taken up by the core pentachord (uzzal) or tetrachord (hicaz), and the point made in relation to hicaz about the differing incidences of *c♯* and *B♭* s here reinforced: *c♯* is as salient within the core pentachord as *A* and not far behind *d*, while the neighbouring main note *B♭* recedes even further, distance from *e* apparently being more important than proximity to *A*.

zirgüleli uzzal

Representing a subsequent differentiation more commonly found, as noted above, in relation to hicaz, this designation (i.e. uzzal with *G♯*) occurs in a later marginal annotation to 209. It could equally have been added alongside 148 and, it might be thought, 302, the one piece assigned to the closely related zengüle.

32. *zengüle*

Cantemir includes zengüle along with uzzal among the descending group of modes using secondary notes. In earlier classifications it had been a member of the most important set of modes, yet it had evidently fallen on lean times, for he is at pains to stress (p. 41) how rare it is, the reason being, essentially, that it replicated, at different pitch levels, other modes in the hicaz group, being analysable as a transposition of uzzal and the lower octave equivalent of

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[197] The breakdown for the individual pieces is as follows:

	G♯	*A*	*B♭*	*c♯*	*d*	*e*	*f♯*	*g*	*g♯*	*a*	*b♭*
15	1	21	15.5	21.5	32	38.5	25	15	0	6.5	0
29	0	23	10.5	16	23.5	40.5	17.5	13.5	0.5	5	0
118	0	22.5	12	27	24.5	35.5	16.5	7	0	8	1
147	0	17.5	10	20	19	16	6	4	0	3.5	0
148	6	33	9.5	20.5	30.5	31	10.5	0	5	4	0
209	6	35	17	31	30	40	13	3	0	1	0
211	0	12	8	16	18	21.5	12.5	1	3.5	6.5	1
324	0	18.5	15	28	29	54.5	33.5	5.5	18	36.5	2.5
333	1.5	13	8	10.5	16.5	22.5	18.5	8	3.5	6	0
	14.5	195.5	105.5	190.5	223	300	153	57	30.5	77	4.5

şehnaz.[198] We are also told that it has no modulatory family of its own, for if its range is extended upwards all the possible terkibs will belong first to uzzal and then, in the higher register, to şehnaz.

As mentioned above in relation to 4. zirgüle, zengüle is also the name of the note *G‡*, and the nuclear outline describes its melodic movement as passing from initial *A* to *G‡* and on down to *C‡*, returning to end on *A*, thus confining it very unusually to the lowest register. But even if restricted in range and with few or no modulatory reinforcements available, it might be thought that its unusual register would guarantee, if not popularity, at least some form of independence. It is therefore all the more surprising to find that the one composition in this mode, 302, which is by Cantemir himself, does not exploit what is stated to be unique about it. The fact that it signally fails to correspond to his own description, lacking any melodic development of the *E* - *A* tetrachord, with *C‡* nowhere appearing and *F♯* the lowest note, may not of itself be particularly startling, but it is still puzzling that in deciding to compose a piece in an apparently obsolescent mode, and certainly one shunned by his contemporaries, Cantemir should have chosen not merely to ignore what he himself states to be distinctive about it but to have produced something that bears such a close modal resemblance to uzzal.

Paradoxically, it is in a modulatory section of another Cantemir piece, 279 H3a, that we encounter a passage conforming to his description of zengüle, and this is included, for the sake of comparison, in ex. 53. The rhythmic cycle of 302 is devr-i kebir, which in the majority of cases has as its internally prominent nodes time units 4, 8 and 11. However, the morphology of the melody here suggests a change of articulation (relatable to the onset of a process of retardation to which this cycle would be particularly subject) whereby in each half cycle the prominent node is delayed, so that the pattern becomes 6, 8 and 13. The bracketed cadence in 279 H3a is that of the main mode, buselik aşirani.

The beginning of 302 provides what appears to be a clear and repeated outline of the typical *A* - *e* uzzal pentachord: H1 consists of an *A* - *e* ascent, filled in on its first appearance, followed by a (slightly elaborated) descent to finalis *A* into which the cadence is integrated. Ma proceeds to amplify the descent repeatedly, being followed in the teslim by the one brief excursion into the lower register. Viewed from the perspective of uzzal, Mb presents a somewhat delayed elaboration of *e*, but one following the normal trajectory of developing the area below before that above, while H2 contains a rising scale sequence that on its first appearance makes the switch from *g* to *g‡*. Comparison of exs. 52 and 53 thus suggests that much is congruent, and the absence from the available uzzal material of the *B♭* included in 302 in the initial ascent could well be a matter of chance. But there is at the same time one significant difference: in 302 it is only in H2 that *a* appears, and then only fleetingly: the highest pitch in Mb is *g*, so that the normal uzzal ascent to *a* in H1and/or M does not appear. Thus whereas 279 H3a concentrates entirely on the low register, the modal identity of zengüle would appear to be established in 302 not so much positively, by the presence of a brief descent to *F♯* in the teslim, but negatively, by the absence of high-register

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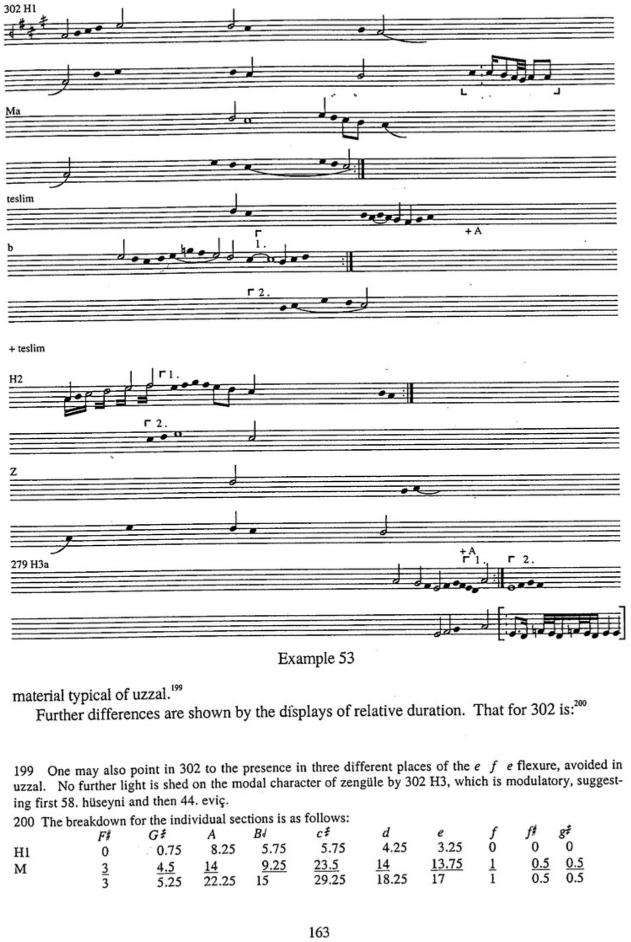
[198] بو مقامك تركباته حكمی يوقدر زيرا كندو پرده سندن تيزه چقسه جمله تركبلری عزال مقامنه تابع اولورلر ، نتيجهء كلام زنكله مقامی شدّ يوزيندن عزّال مقاميدر وسكزنجی پرده لرك حسابی اوزره نرم شهناز مقاميدر ، اول اجلدن مقام مزبور اوزرنده قتی آز نسنه تصنيف اولنمشدر .



Example 53

material typical of uzzal.[199]

Further differences are shown by the displays of relative duration. That for 302 is:[200]

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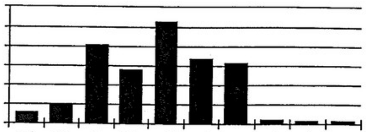
[199] One may also point in 302 to the presence in three different places of the *e f e* flexure, avoided in uzzal. No further light is shed on the modal character of zengüle by 302 H3, which is modulatory, suggesting first 58. hüseyni and then 44. eviç.

[200] The breakdown for the individual sections is as follows:

	F♯	*G‡*	*A*	*B♭*	*c‡*	*d*	*e*	*f*	*f♯*	*g‡*
H1	0	0.75	8.25	5.75	5.75	4.25	3.25	0	0	0
M	3	4.5	14	9.25	23.5	14	13.75	1	0.5	0.5
	3	5.25	22.25	15	29.25	18.25	17	1	0.5	0.5



As before, it would be rash to generalize, but a number of comparative points may nevertheless be made. Thus although the *E* - *A* tetrachord is hardly explored at all, the evidence of 302 suggests that zengüle had a lower centre of gravity than uzzal: we find a significant reduction in the values for the higher notes above *e* (which amount to a mere 2% in zengüle as against 23% in uzzal) and a marked increase in the values for the lower notes. There is also a reduction in the salience of *e* (now marginally below that of *d*) and, above all, a much higher value for *c𝄲* (26% as against 14% in uzzal). Even if evidently prominent, *e* does not appear in cycle final position, whereas *c𝄲* does (functioning, indeed, as the finalis in H2), although it should be added that comparison with other pieces by Cantemir suggests that the salience of *c𝄲* may be less a characteristic of the mode than a reflection of his own compositional habits.

33. şehnaz

The following pieces are in this mode:

210, 217, 326, 329

and it is also exemplified in 296.

Like zengüle and uzzal, şehnaz is for Cantemir another of the descending group of modes using secondary notes and, as usual, he begins his account (pp. 38-9) by referring to the note in question, the eponymous *g𝄲*. (That this note is characteristic is underlined by his failure to mention alongside it here the other secondary note that always appears in şehnaz, *c𝄲*.) The nuclear outline of its main features gives the finalis as *A* and defines *f♯* as crucial to its identity, whether in ascent or descent. In the expansion, Cantemir states that after initial *a* the melody descends through the notes *g𝄲 f♯ e d c𝄲 B𝄳* to the finalis, *A*, and adds a remark, parallel to that in the description of uzzal, that if desired the lower register can be explored via either *G𝄲* or *G*, the same route serving for the return to *A*: the only difference between the two is that the lowest note is here defined not as *C𝄲* but as *D*.[201]

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[201] دوکاه پرده سندن دخی اشاغه وارمق مراد ایلدیکده دلر ایسه زنکله پرده سی ایله دلر ایسه راست پرده سی ایله یکاه پرده سنه دکاینه بلور وکنه اول طریقدن عودت ایدوب دوکاه قرارینه کلور .

The description of şehnaz is then rounded off by an unexpected final remark:

بلمش اولکی قول ادوار هندی موجبنجه مخیردن قوپوب ونرمه وارنجه تمام پرده ایله یعنی کردانیه پرده سی ایله حرکت ایدر ودوکاه ده قرار قلر .

Of interest here is less the notion that *g* might be used in descent (once the characteristic *g𝄲* had been well established) than that Cantemir should wish to refer to a feature the authority for which is an 'Indian' source.

In most cases the expositions are in general accord with Cantemir's outline of an initial *a* and finalis *A* linked by a straightforwardly descending melodic contour. Within this framework, assuming the compressed representation in 296 to be typical, one would expect to find sustained emphasis on the upper register, and specifically on the *e* - *a* tetrachord, giving initial prominence to *a* and eventually cadencing on *e*, followed by a fairly rapid descent to *A*. How far the initial exposition in the full length pieces conforms to this model may be seen from ex. 54, which proceeds only to the first full cadence,[202] except in the case of 329, where M has also been included because of the brevity of H1.

The paradigm suggested by 296 is thus clearly echoed in 210 and 217. In general, they contain little elaboration in the descending line below *d* and differ from 296 only by their repetition (multiple in the case of 217) of the descent from *e*. It is also discernible in 326, although before the further development of the *e* - *a* tetrachord in M this inserts an ascent from *A*. It is with such an ascent, compressed into an octave leap, that 329 begins, but thereafter this piece runs counter to expectations, for rather than development of the *e* - *a* tetrachord and then a descent what we encounter in H1 is the briefest of statements followed by another octave leap back to *A* and an outline of the *A* - *d* tetrachord; the contrasts are intensified rather than effaced in M, where neither subsection develops the *e* - *a* tetrachord at all, and only the second reaches and gives some prominence to *e*. Thus far this piece seems to lie rather uneasily between şehnaz and uzzal (while Ma considered in isolation would best be classified as hicaz), and the main reason for not assigning it to uzzal would seem to be the precipitate nature of the ascent to *a* and the lack of any elaboration of the area around *e*, which, incidentally (and equally uncharacterically in both modes), is wholly absent from H1.

Modal ambiguity, or at least uncertainty as to which mode a piece should most appropriately be assigned, surfaces even more acutely in the case of 210, which for ʿAlī Ufḳī was in uzzal and for Cantemir, to judge by the fact that the şehnaz of the heading replaces an earlier, crossed-out uzzal, was somewhat problematic.[203] On the basis of H1 alone there can be no doubt that şehnaz is the more appropriate designation: as ex. 52 shows, uzzal begins from *e*, or ascends to it, and elaborates the area around it before rising to *a*, so that the immediate and prolonged emphasis on this note in 210 would be quite uncharacteristic. The problem arises, rather, in M. As in 12, where the change of mode in M even gives the piece its title, this provides one of the rare instances of an immediate and extensive modulation, for with the substitution of *g* for *g𝄲* throughout it is clearly no longer in şehnaz.[204] Ma and b exhibit obvious resemblances to uzzal, even if the identification is not absolutely sure,[205] while until its final cadence on *A* Mc is unambiguously in 34. nigriz. In H2 *g𝄲* is restored, and with it şehnaz, but the expectation that H2 might provide further development remains unfulfilled: after a brief reprise of some of the main features displayed in H1 it continues

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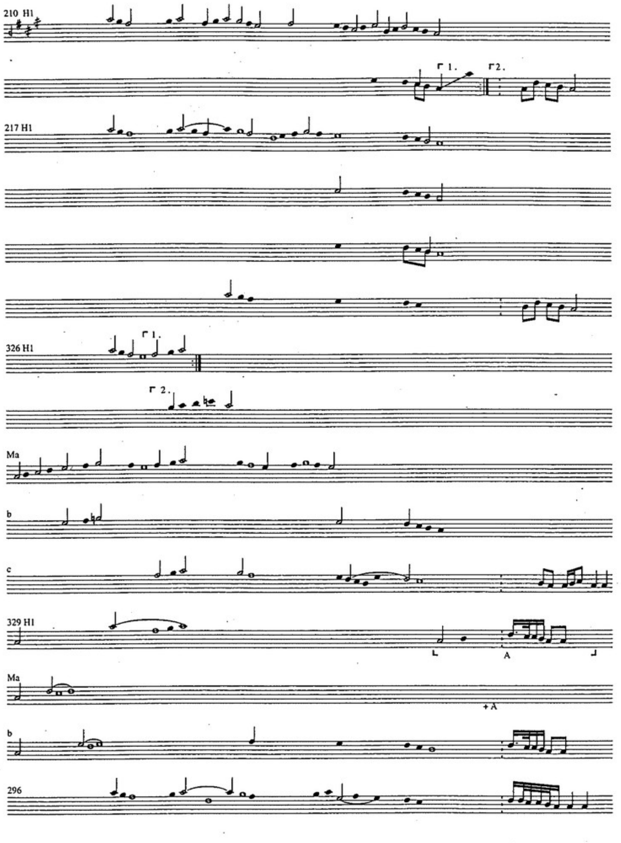
[202] Covering therefore H1 in 210 and 217 and both H1 and M in 326.

[203] That Cantemir's final verdict was for şehnaz is confirmed by the first index, p. 120.

[204] Although *g𝄲* had been established in H1 it can hardly claimed that the use of *g* (exclusively, in both ascent and descent) could be accounted for by M conforming to the 'Indian' version, which sanctions it in descent. It may be noted, incidentally, that 329 is characterized as *hindī* and that *g* never appears in it.

[205] Ma appears to give insufficient initial prominence to *e*, and although the following rise to *a* is orthodox enough Mb is slightly unusual in ascending beyond *a* to *d'*.



Example 54

with twice-repeated ascending and descending scales. H3, in contrast, concentrates on the *e* - *a* tetrachord in the first two of its four subsections, but thereafter drifts away from şehnaz proper, exploring in H3c the area of overlap between şehnaz, uzzal and hicaz, while in H3d, where only *g* appears, the effect is more of uzzal. Taken as a whole, 210 thus seems constructed around a set of moves back and forth between related modes:

H1	şehnaz		
Ma, b	uzzal	Mc	nigriz (+ uzzal/şehnaz cadence)
H2	şehnaz		
Ma, b	uzzal	Mc	nigriz (+ uzzal/şehnaz cadence)
H3a, b	şehnaz		
H3c	şehnaz, uzzal, hicaz	H3d	uzzal
Ma, b	uzzal	Mc	nigriz (+ uzzal/şehnaz cadence)

The fact that this piece was assigned to uzzal by ʻAlī Ufḳī and also at first by Cantemir may thus be simply a reflection of the greater amount of uzzal material it contains with the repetition of M, while Cantemir's second thoughts could have given greater weight to the modal identity of the beginning of each hane, taking account, in particular, of the fact that şehnaz is maintained throughout H1 and H2.[206]

While not presenting problems of definition of the same order, the remaining pieces also generally confine their modulations within the same narrow compass, and likewise explore areas of modal ambiguity.[207] As for the further development of şehnaz itself, 217 M has the same range as H1, but remains in the upper register longer, descending only after time unit 60 (as compared with time unit 32 in H1). In 217 and 329 there is an even clearer tendency in H2 to extend the range upwards,[208] but not so in 326, where H2a echoes H1 and H2b consists of a long descent from *c'*.

The display of relative duration omits 210 M because of its modulatory character, and only the seconda volta of H1 is given. *f* is subsumed under *f♯* and *d♯* under *d*; *c'* (one time unit in 326) is omitted, so that we have:[209]

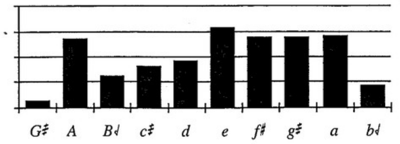
[206] If this interpretation is accepted, the appeal made in the footnotes to 210 in Part i to historical change as a possible explanation for the shift from uzzal to şehnaz in the labelling of this piece becomes unnecessary.

[207] 326 H3 largely substitutes *g* for *g♯* and can be thought of as mainly in uzzal, while 217 H3 hints first at eviç but then suggests uzzal by according prominence to *e* before an ascent restores *g♯* and returns to şehnaz.

[208] In 329, after a sequential ascent in H2a from *G♯* to *a*, H2b begins by elaborating the *a* - *c'* trichord before concentrating on the *e* - *a* tetrachord (thereby making up for what was omitted from H1); and in 217 H2 introduces first *c'* and then *c♯* and *d'*, time units 21-32 and 51-62 being devoted to the elaboration of the *a* - *d'* tetrachord. 217 Z, in contrast, dwells mainly within the *A* - *e* pentachord, while 329 Z, after a medial cadence on *d*, simply repeats H1 **2** (similarly, H3 **1** is a near repeat of Mb **1** and H3 **2** of H2b **2**).

[209] The breakdown for the individual pieces is as follows:

	G♯	*A*	*B♭*	*c♯*	*d*	*e*	*f♯*	*g♯*	*a*	*b♭*
210	0	7	5	8	9	12	9	10	9	9
217	4	21	9	12	16	26	29	29	25	5
326	1	10.5	5.5	10	6	23.5	18	19	21.5	4
329	1.25	17.75	8	4.75	7	3	2.25	1	3	0
296	0	4.5	0.25	1.5	3	6.75	4.5	3.5	4.75	1.25
	6.25	60.75	27.75	36.25	41	71.25	62.75	62.5	63.25	19.25



There is thus a clear contrast of registral emphasis with uzzal, for here the *e* - *a* tetrachord accounts for 57% of the total (and if the atypical profile of 329 were discounted the figure would be even higher). In contrast, the percentages for *c*‡ and *d* are markedly lower. There are no appreciable variations in salience within the *e* - *a* tetrachord, with the result that one point that neither ex. 54 nor these statistics shed any light on is Cantemir's remark identifying *f*♯ as crucial to the identity of şehnaz. Although obviously a member of the basic pitch set, it has no cadential function and there is no reason to consider it any more significant than the others: its melodic utilization exhibits no peculiarities that might have led to it being considered special.

34. nigriz

The following pieces are in this mode:

165-8, 346

and it is also exemplified in 296.

The last of the hicaz group, nigriz is the only one to be classified as a compound (*mürekkeb*) makam, being said (pp. 44-5) to be made up of 48. rast and uzzal. Beginning from *G* it ascends through *A* and *B*♭ and then, like uzzal, through *c*‡ to *d* and *e*, and thus far Cantemir's description is perfectly clear and seemingly in accord with a derivation from rast and uzzal. But the formulation of the next part is rather strange, for he states that the ascent can then either proceed to the upper register via *f* and *f*‡, as in 23. mahur, or via the main notes (i.e. *f*♯), as in rast.[210] Rather than a simple blunder associating with mahur an ascending line containing both *f* and *f*‡ one might suspect here a conflation of possibilities, for all three notes do in fact occur, albeit in different contexts: in the exposition (H1 and M) we encounter *f*♯ (with *f* being confined to the flexure *e f e*), and in the high register passages of H2 *f*‡. Descent, the description continues, is by the same route down to the finalis, *G*, and if it is desired to explore the lower register *F*‡ is preferred, although *F*♯ is also possible, as in rast, if required by a terkib (i.e. for purposes of modulation), the finalis again being *G*.[211]

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210 حسینی پرده سندن دلر ایسه عجم پرده سیله وماهور پرده سیله ماهور یوزیندن ، دلر ایسه تمام پرده لر ایله راست یوزیندن تیز پرده لرده حرکت ایدر .

211 راست قرارکاهندن دخی اشاعه اینمك مراد ایدر ایسه محصوص رهاوی پرده سی ایله کزر لکن ترکیك اقاضاسی اولور ایسه تمام پرده لر ایله راست یوزیندن حرکت ایلسه منعی دکلدر همان قرار استراحتی راست پردسی اوله .

Most of these features are found in the corpus, but the first statement appears to be the least well founded: in most cases *G* is initial, but only in 165 does the piece begin with anything approaching a stepwise ascent, as may be seen from ex. 55, which includes H1 and M in all five pieces. Apparent here is a slightly higher than average degree of flexibility in the disposition of material, possibly a function of there being no other mode in the group with the same finalis, so that its identity is relatively easy to establish without specific melodic conventions needing to be foregrounded. Indeed, if the presentation in 296 is anything to go by, the prominent *d* and the finalis, together with the standard approaches to them, could even appear in reverse order—and therefore with their roles exchanged.[212] In the full-length pieces, however, it is clear that the pattern is for there to be an initial *G* → *d* move followed by quite large-scale elaboration of the area around *d*. A *G* - *d* jump is a standard (sub)section-opening gambit, but it is interesting to observe that it never appears more than once in the same piece, and not at all in 167, which after an initial *d* introduces a rising formula to return to it. Occasionally *G* is preceded by an introductory phrase.[213] The elaboration around *d* will frequently begin with the notes below (a strategy encountered elsewhere) but normally also includes at some point during the exposition, that is, if not in H1 then in M, an ascent or jump to *g* (often in the context of the formula *d g f*♯ *e d*).[214] A considerable amount of elaboration is also encountered in the descent from the peak *g*, although it usually lessens somewhat, as in other modes, beneath *d*. The cadence area is yet again sometimes integrated within the descent and sometimes an extension after *G* has been reached, as, spectacularly, in 165 M, which indulges in multiple repetitions, with very minor variations, of the cadence material.

In H2 *g* is emphasized, and were it not for the evidence of 346 one would conclude, in contrast to uzzal, where modulation is largely confined within its own modal family, that at this juncture an integral feature of the structure of nigriz was a modulation into mahur. There is, however, no particular consensus about the range: in 165 the modulation into mahur rises no higher than *a*, in 167 it reaches *b*♭, in 166 *c*', and only in the more extensive treatment accorded it in 168 does it reach *d*'. The melodic strategy of 346 H2, apart from a falling-rising *g* - *G* - *g* scale, hardly differs from that found elsewhere, so that the main feature distinguishing it is retention of *f*♯, the note through which the others, still within H2, begin to effect their return to nigriz.[215]

167 H3 recycles material from H1 and H2 and is clearly in nigriz, as is 166 H3a, which provides further development of the *d* - *g* tetrachord. H3b has a comparable contour, but

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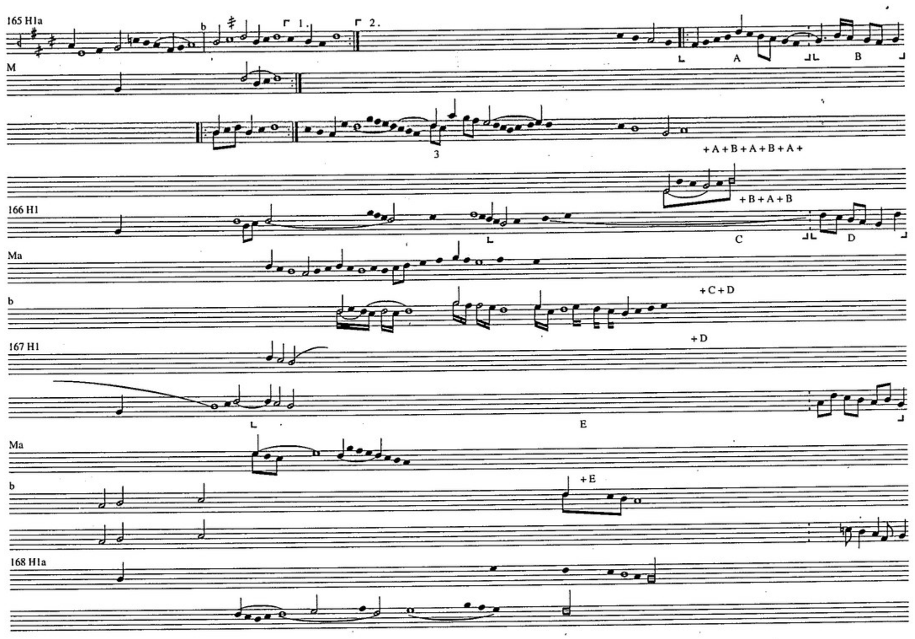
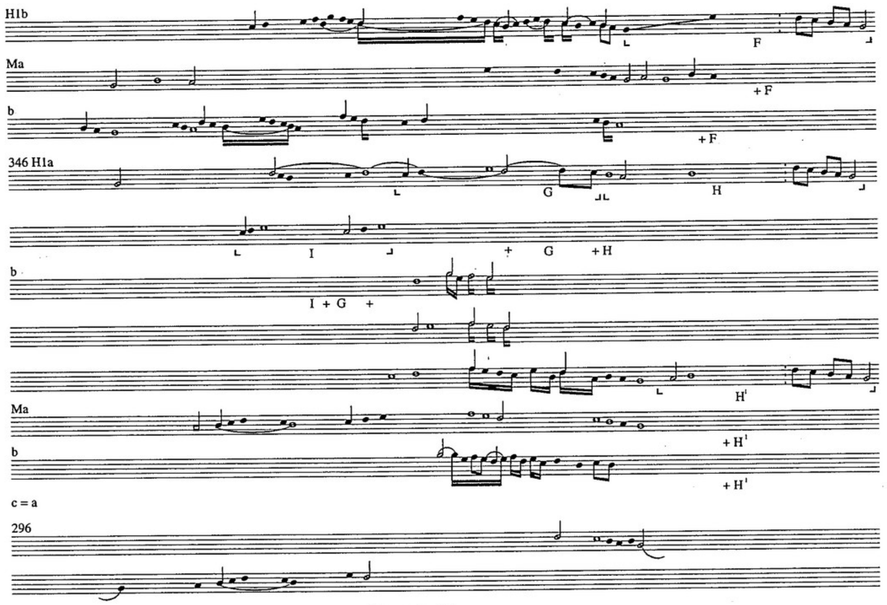
212 To be noted, further, is the final *G* - *d* jump in the cadence of 166, although one might surmise that the *d* could be omitted in the final repetition of M at the conclusion of the piece.

213 Either descending, as in 168 Mb, or rising, as in 167 Mb (from *F*‡) and 165 H1 (from *E*, the only time this note is used).

214 Only in 166 does the introduction of *g* occur in both H1 and M.

215 In 168 this is integrated into a lengthy sequential descent from *a*, followed in H3a by a lengthy sequential ascent from *F*‡ which proceeds via *f*‡, thereby restoring mahur above *d* and cadencing on *g*. H3b continues with mahur and fails to reintroduce *f*♯, so that it is only interpretable as returning to nigriz when *B*♭ is reached at time unit 25. A particularly economic return, on the other hand, is provided by 167, where H2a 4 simply concludes with a seconda volta transposition down a fourth (*b*♭ thus becoming *f*♯) of H2a 2: 9-16, and an even greater frugality of means is exhibited in H3, where the same passage is repeated at the end of H3a, which otherwise consists of a repetition of H1 1 and 2: 1-8 and, partially, at the beginning of H3b.


165 H1a
1.
2.
M
A
B
3
+ A + B + A + B + A +
+ B + A + B
166 H1
C
D
Ma
b
+ C + D
+ D
167 H1
E
Ma
b
+ E
168 H1a

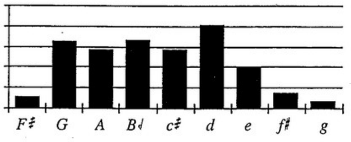

H1b
F
Ma
+ F
b
+ F
346 H1a
G
H
I
+ G + H
b
I + G +
H'
Ma
+ H'
b
+ H'
c = a
296

Example 55

with *f* replacing *f*♯, a substitution that also occurs in 346 H3, where similar melodic resources are marshalled. The shift might suggest a modulation, but a rather more plausible interpretation is that this is the *f* of Cantemir's definition, in which case it appears to characterize not so much an alternative as a secondary form only explored after the basic form with *f*♯ has been established. According to this reading the one H3 that clearly modulates is that in 165, and then into the closely related hicaz.

Also to be noted in the context of modulation is the relationship between nigriz and 48. rast, which likewise has a prominent *G* - *d* pentachord and finalis *G*. The opening of 165, for example, appears to be a formula held in common, as it occurs at the beginning of 103 and 104, both in rast (with the result that the identity of nigriz in 165 cannot be said to be established until H1b). But of much greater significance within the corpus as a whole are the modulations into nigriz, twelve in number, that appear in pieces in rast. But although adding significantly to the amount of material available for scrutiny they do not alter the picture presented by ex. 55 in any significant way, and they could nearly all be plotted onto it without further ado. In five, the expected elements occur in the standard order,[216] and while the remainder dispense with the initial *G* → *d* move and tend to begin with the *d* - *G* descent followed by an ascent to *d*, they do no more in essence than reorder familiar elements.

In the display of relative duration *c* is subsumed under *c*♯ and *f* under *f*♯; *E* (two time units in 165) and *a* (one time unit in 165 and one and a half time units in 166) are omitted, so that we have:[217]



Interesting to consider here within the obviously predominant *G* - *d* pentachord is, again, the relative salience of *c*♯ and *B*𝄳. One might have expected that, as with hicaz, the potential leading-note role of *c*♯ in relation to the prominent *d* would have resulted in a significantly higher figure than for *B*𝄳, but despite the occurrence of *d c*♯ *d* as a cadential figure it cannot

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[216] 106 H3a, 121 Ma 3, 127 H3, 214 H3 and 237 H3. (237 H3a begins with *d*, but this comes immediately after the *G* finalis of M, and the parallel H3b begins with a *G* - *d* jump). The cadence may, however, be on *d* rather than *G*.

[217] The breakdown for the individual pieces is as follows:

	F♯	*G*	*A*	*B*𝄳	*c*♯	*d*	*e*	*f*♯	*g*
165	20	63	41	42	23	37	8	1.5	1.5
166	0	7	8	15.5	21	39	14.5	7.5	6
167	5	13	18	23	16	14	5	1	1
168	1	34	28	29	26	40	22	9	3
346	0	44	46	53	53.5	70.5	47	17	5
	26	161	141	162.5	139.5	200.5	96.5	36	16.5

be said that *c*♯ fulfils this role with great frequency, and as a result the profile that emerges here, even if it cannot be interpreted as suggesting triadic emphasis, does indicate that the position of *B*𝄳 at the mid-point of the pentachord secured for it a salience at least as great as that of its immediate neighbours.

2.2.7 *The acem group*

This is the final group of modes characterized by the use of a secondary note, in this case the eponymous *f*. In addition to acem itself it consists of acem aşirani, acem yegâhi, acem-buselik and çargâh-acem.

35. acem

The following pieces are in this mode:

18, 50, 135-43, 149-53, 186, 187, 260, 261, 269, 292[218]

and it is also exemplified in 296.

Of all the modes characterized by the use of a secondary note acem was, to judge by the 22 instrumental pieces it boasted, by far the most popular, which seems difficult to reconcile with the opening remark in Cantemir's account (pp. 37-8) to the effect that it is a 'strange and curious' (*ġarāib ve ʿacāib*) mode.[219] Unfortunately he offers no reason for this reaction, but although it suggests that he may not have been particular fond of acem it cannot simply be assumed that the absence from its repertoire of any compositions by him resulted from some particular antipathy, for it is just one among several common modes in the collection that contain nothing of his. His description is in the usual two-part format, the nuclear statement characterizing acem by its initial, *A*, and an ascent on main notes to *e* followed by *f*. The expansion refers to a further ascent via *g* to *e'* followed by a descent, using the same notes, to the finalis, *A*. Cantemir adds that, if desired, the lower register can be explored down to *D*, returning via main notes to *A*, which presumably implies that *F*♯ would be used rather than *F* (at least in ascent),[220] and the account concludes by distinguishing three possible finalis notes: *A*, associated with acem proper (*bi-'l-ẕāt*); *f*, which is termed a suspended cadence and again marks pure (*ṣāfī*) acem;[221] and *F*, which signals the terkib of the same name, acem aşirani. There is no following list of modes forming a modulatory family related to acem.

Nearly all of these features are to be found in the notated repertoire, even if the ascent to *e'* and the descent to *D* are extremely rare.[222] Less rare, but still by no means standard, is an initial ascent on main notes to *f*: much more usual, as elsewhere, is a jump, in this case *A* - *f* (with the common variant *A g f*), while it may be noted that the brief exemplification offered

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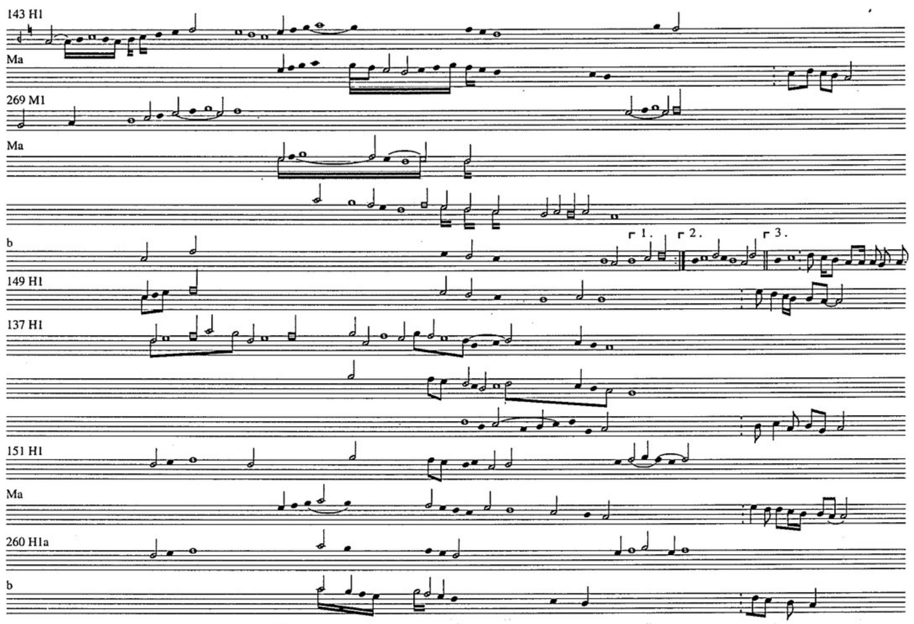
[218] Feldman, op. cit., pp. 356-8 provides a transcription of 138 juxtaposed with the ʿAlī Ufḳī version.

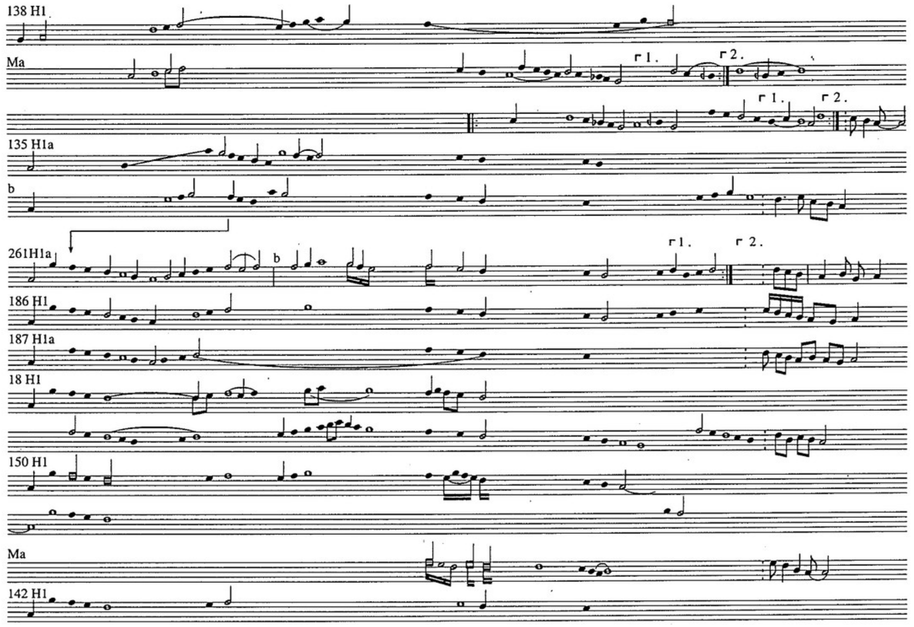
[219] Especially as it appears to have been equally popular in the vocal repertoire.

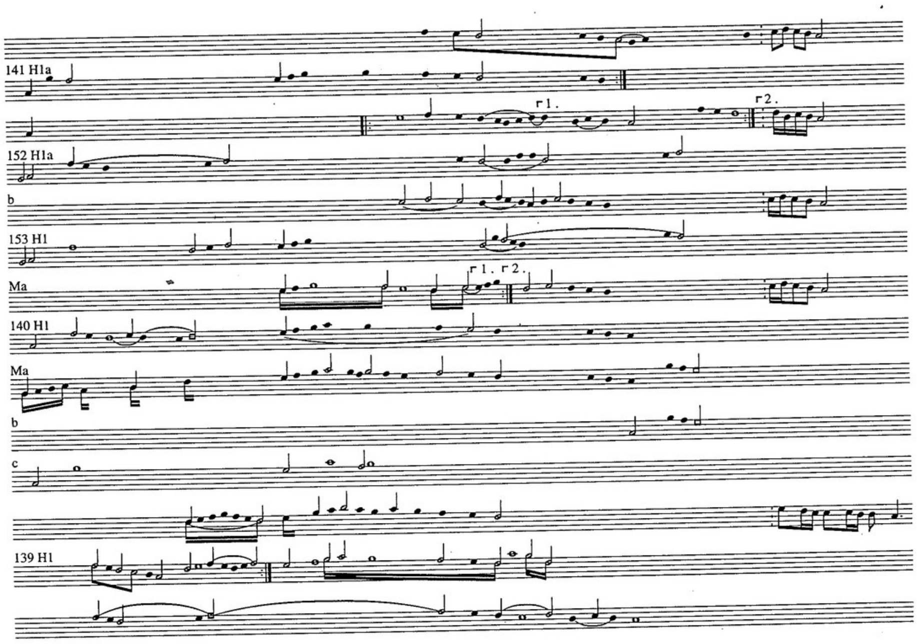
[220] دوكاهدن دخی آشاغه اينمك مراد ايدريسه يكاهه دك اينه بلور ، آندن كنه تيزه چقوب وتمام پرده لر ايله كلوب دوكاه پرده سنده قرار استراحت قلر .

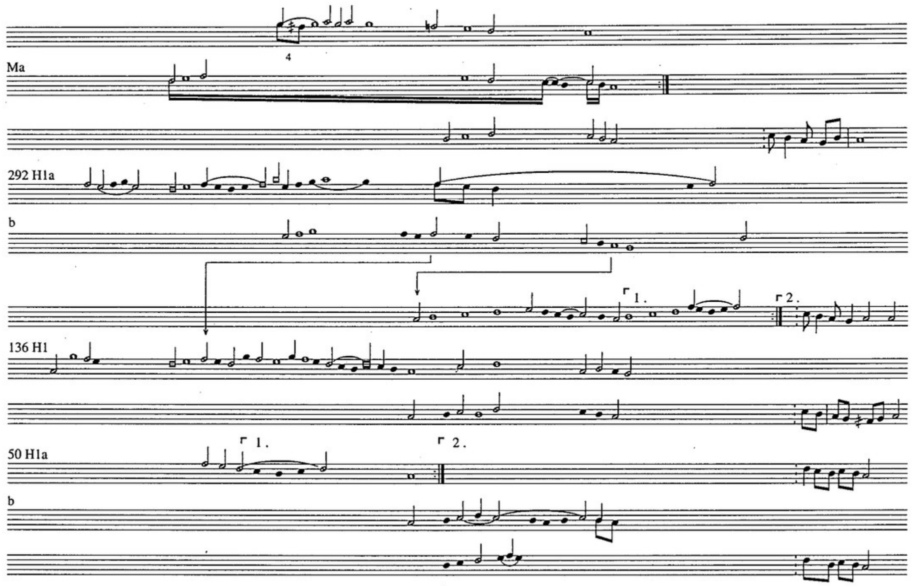
[221] The term for 'suspended cadence' is exactly that current in modern theory, asma karar:
ثانيا كندو عجم پرده سی كه اصما قرار دينلور وكنه صافی عجم مقامی اجرا اولنور .

[222] Although 135 H3b actually descends as far as *C*.


143 H1
Ma
269 M1
Ma
b
r 1.
r 2.
r 3.
149 H1
137 H1
151 H1
Ma
260 H1a
b


138 H1
Ma
r 1.
r 2.
r 1.
r 2.
135 H1a
b
261H1a
b
r 1.
r 2.
186 H1
187 H1a
18 H1
150 H1
Ma
142 H1


141 H1a
r 1.
r 2.
152 H1a
b
153 H1
Ma
r 1. r 2.
140 H1
Ma
b
c
139 H1


4
Ma
292 H1a
b
r 1.
r 2.
136 H1
50 H1a
r 1.
r 2.
b

Example 56

in 296 begins directly with *f*, as do 139 and 292. Of greater descriptive interest is Cantemir's definition of *f* as a suspended cadence and a number of (sub)sections do, indeed, cadence on *f*; but others cadence on *d*, and the importance of this note fails to be indicated.

Given the frequent use of a suspended cadence on *f* in the first (sub)section the eventual cadence on *A* is sometimes delayed beyond the end of H1, thus increasing yet further the amount of material to be examined. Accordingly, the order of events in ex. 56 above no longer follows the numerical sequence but attempts clarification by grouping pieces according to similarities in their openings (which results in the incidental awkwardness of placing first a piece including a modulatory passage).[223] Additionally, to avoid further linear expansion the vertical alignment is shifted on occasion, as indicated by arrows. 150 is in the rhythmic cycle havi, in which the prominent time units appear to be 9, 17, 25, 33, 41, 49 and 61.

Although the order of presentation suggests that within a mode as important as acem it might be possible to discern and characterize various subgroups, there is at the same time an overall pattern to which all adhere. In its full form this consists of an initial ascent or jump to *f*, elaboration involving a descent to *d* or even *A* followed by a return to *f*, an ascent to *a*, and then a descent either to a suspended cadence on *f* or *d*, or to *A*, frequently with considerable elaboration of the area around *d*, the final cadence material being sometimes integrated into the descent but more frequently taking the form of an elaboration after *A* has been reached.

The material preceding H2 not included in ex. 56[224] largely conforms to the outline given there, so that little comment is required. Noteworthy, however, is the frequent resumption after the first cadence on *A* not with a repeat of the initial move to *f* but with large-scale elaboration of the area around *d*.[225] A related development[226] involves elaboration of the *G* - *d* area at some length before ascending to *f*, thereby suggesting a degree of overlap with 48. rast and 55. uşşak[227] which is again hinted at by the beginning of 187 Ma where, after *d* is reached, there is an *A* - *a* scale that confirms its modulatory nature by replacing *f* with *f*♯.[228]

The same pitch set, with *f*♯, is retained in 187 H2. But this is the only sustained example of modulation in H2, and if one also sets aside as exceptional 138, which fails to rise above *f*, it is possible to speak of a common H2 strategy, intrinsic to acem, consisting of a shift of emphasis upwards without changing the pitch set. The relevant material is displayed in ex. 57, which excludes 138 but does include 187, where there is a family resemblance in the melodic outline. (Sub)sections not cadencing on *f* or *d* are normally only tracked down as far as *d* in descent. The square brackets in 135 relate to an initial block of material in mahur:

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[223] The intrusive *B*♭ in 138 leading to a cadence on *G* clearly points to 17. nihavent.

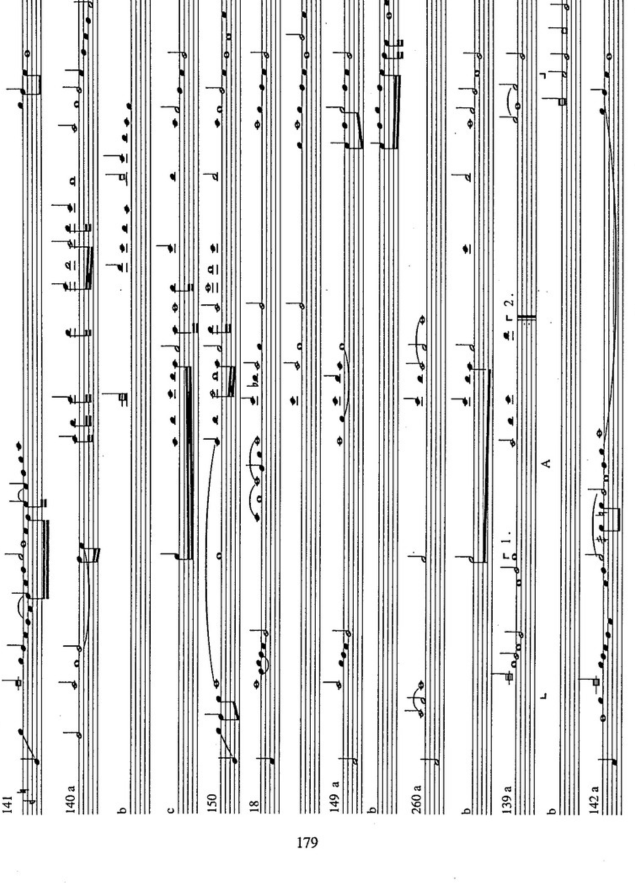
[224] 140 Md-g, 139 Mb-d; Mb in 138, 143, 150, 151 and 153; M in 18, 135, 136, 137, 142, 149, 152, 186, 260, 261 and 292; 141 H1b, 187 H1b and M.

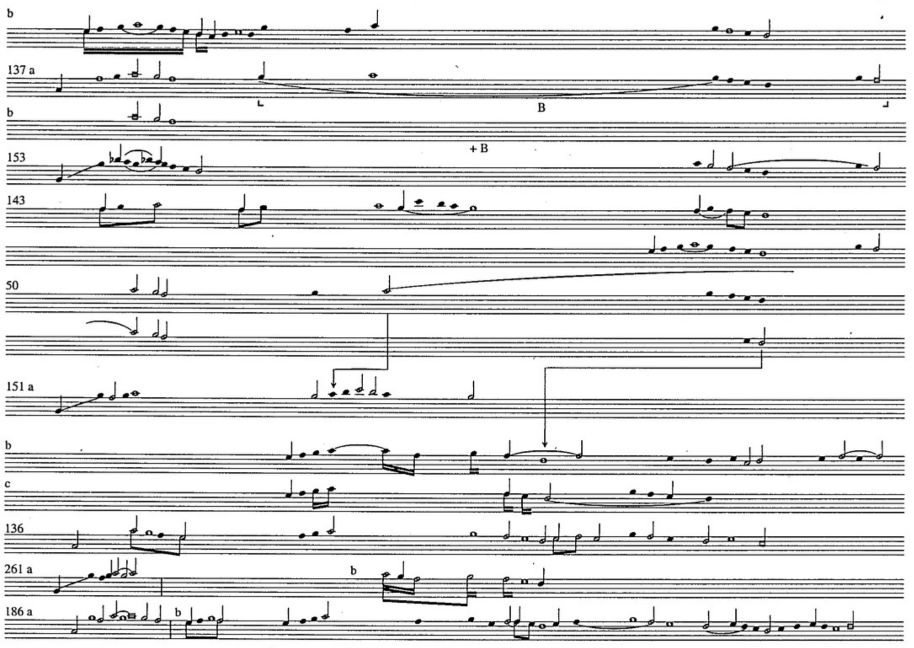
[225] As in 140 Md, 150 Mb, 153 Mb and 187 H1b.

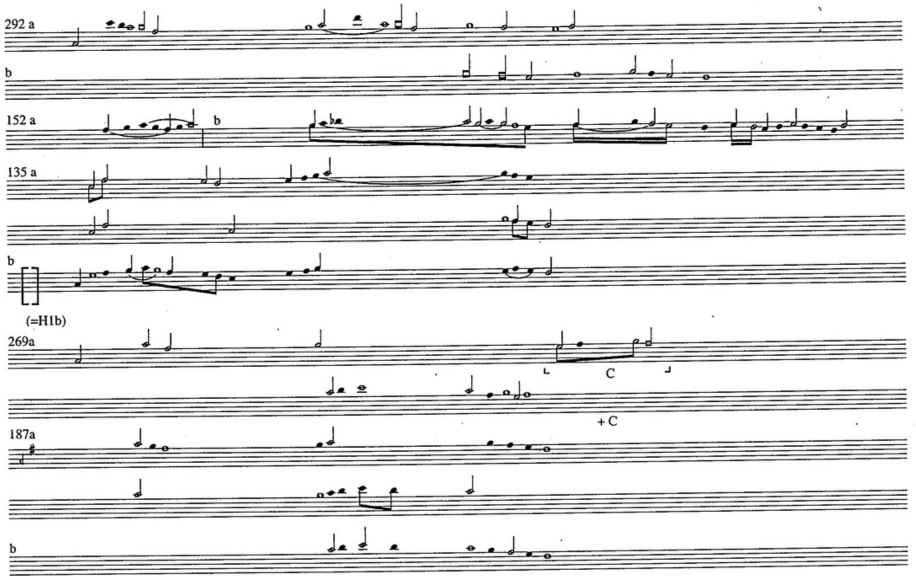
[226] In 136 M, 139 Mb and 149 Ma.

[227] Noteworthy here is 142 M, which consists largely of descending sequences over the *G* - *e* range. Further modulatory allusions occur in 135 M, 151 Mb and 152 M. 135 M is an exceptionally lengthy section which rises (like 18 H1) to *c* ′, and includes (like 151 Mb) two instances of the flexure *d* *e*♭ *d*, presumably hinting at 26. beyati. 152 M alludes to 14. çargâh in Mb 1 and, more explicitly, to rast in Mc 1.

[228] The cadence on *e* then suggests a shift to 58. hüseyni and the beginning of Mb, which gives prominence to *a* then *d*, suggests a further move to 57. neva.




b
137 a
B
b
+ B
153
143
50
151 a
b
c
136
261 a
b
186 a
b


292 a
b
152 a
b
135 a
b
(=H1b)
269a
C
+ C
187a
b

Example 57

As comparison with ex. 56 makes clear, there is a tendency in H2 for the same forms of melodic development to take place two scale degrees higher. But it is by no means always the case that the highest register is explored: *e'* appears in only two pieces and the highest note is usually *c'*. *f* remains prominent, but greater emphasis is now accorded to *a*, in the elaboration of which *b*♭ often replaces *b*𝄳 if no higher pitches are used—in other words the *a b*♭ *a* flexure occurs frequently. This may suggest a certain kinship with 21. sünbüle, but there is no trace of the distinctive sünbüle jump from *e* to *c*: *d* is clearly prominent (the *d* - *a* pentachord being the most important structural element) and is frequently cadential, medially as well as finally.

Further development of acem occurs in Z in 18 and 292 and in H3 in several pieces.[229] 137 H3 is largely a reprise of H2c, but otherwise these sections revert, as expected, to the range of the exposition, and in technique they contain nothing untoward: there is, again, increased dependence on scalar passages and, especially, on the sequential development of small-scale elements. *f* or *d* is preferred to *A* as finalis, presumably to contrast with the cadence on *A* that will follow in the subsequent ritornello.

139 alludes to 23. mahur in H1 and, as noted above, 187 hints at modulation in M and H2, but otherwise the only exception to the observation that virtually no modulations appear before H3 occurs in 135, where they begin in M.[230] In H3, inevitably, despite the fact that several pieces remain throughout in acem, a range of other modes is introduced, but none with sufficient frequency to suggest predictability (it may be recalled that apart from acem aşirani Cantemir cites no related terkibs).[231] More difficult to detect, given the reduced need in H3 to emphasize notes signalled as prominent in the exposition, are modulations where there is no alteration to the pitch set, although it is reasonable to suspect allusions to çargâh.[232]

As a further reaction to the increase in the number of pieces in certain modes comprehensive statistical coverage will be abandoned, and only a sample will be taken for analysis. The following display is based on an arbitrary selection of the first eight peşrevs and the two (yürük) semais, 260 and 261, with both H1 and M being included. 135, 138

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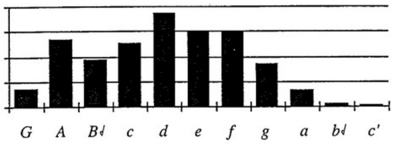
[229] 18 (save for a very brief initial excursion into 34. nigriz), 137, 141, 142, 143, 186, 269, 292, to which may be added 187, which returns to acem after the modulation of H2.

[230] It hints at (?52. arazbar or) beyati and H2a at çargâh, and H2b begins in mahur. Elsewhere there are occasional *c B c* flexures, but these are insufficient to establish a shift into 27. buselik, and the apparently strange *g g*♯ *g* flexure in 142 H2 is readily explained, even if still modally obscure, as a sequential transposition of a previous *a b*♭ *a*.

[231] The more readily detectable ones include, as usual, members of the hicaz family: 30. hicaz itself in 50 (where H3 is a transposition down a fifth of H2), 261 (where **1-2** are a transposition down a third of M **1-2**) and 138, where it appears to transform into 32. zengüle, but with *B*♭ instead of *B*𝄳; and 34. nigriz which, as already mentioned, makes a fleeting appearance in 18. Others include 25. saba in 149, beyati (and possibly also arazbar) in 260, 58. hüseyni in 136 (where *e* is clearly prominent but only *f* appears, even in ascent). Also to be noted is a second brief passage in mahur in 135 (following that in H2b) and a suggestion of 17. nihavent in 151. In 140 there is a lengthy passage with *B* and *f* which seems to end in buselik, but for the most part (the beginning of H3c) is more probably to be identified as 60. hüseyni-buselik (or possibly 38. acem-buselik), while the briefer H3a and b have finalis *G* and are either in an unidentified terkib or are to be regarded as a transposition of çargâh.

[232] In 150, where H3a has final *c*, and, initially, in 153 H3a and, if more faintly, in 187. But Cantemir also notes the existence of a compound, 39. çargâh-acem, which this material might possibly exemplify.

and 139 M all contain repeated segments, for which only the seconda volta form is counted. Similarly, in 140 Md only **1-3** are counted, while in 261, where the same prima and seconda volta variants appear in both H1 and M, one of each is counted. *B*♭ is subsumed under *B*𝄳, *e*♭ under *e*, and *f*♯ under *f*. *F*♯ (two time units in 136, and two in 138) is omitted, so that we have:[233]



With this may be compared the display for H2 (complete) in the same sample, retaining 138 therefore despite its atypical profile. 139 H2a contains repeated segments, for which only the seconda volta form is counted, and it is again the seconda volta form that is counted in 261 H2b. *B* is subsumed under *B*𝄳 and *f*♯ under *f* but, given their different distributions and importance in the upper register, *b*♭ and *b*𝄳 are given separate entries. *F*♯ (one time unit in 136) and *e'* (two and a half time units in 140) are omitted, so that we have:[234]

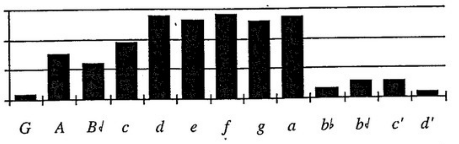
---

[233] The breakdown for the individual pieces is as follows:

	G	*A*	*B*𝄳	*c*	*d*	*e*	*f*	*g*	*a*	*b*𝄳	*c'*
18	3	18	15	15.5	32.5	30	30	20	7	3	2
50	1.5	14.5	10.5	11	12.5	9	5	0	0	0	0
135	6	21	16.5	26	41	26	21.5	22	9.5	1.5	1
136	16	48	26	35	38	22	14	7	0	0	0
137	10	36	23	39	43	28	36	21	4	0	0
138	14.5	23.5	15.5	21.5	31.5	22.5	23	5	1	0	0
139	7	43	34	45	66	47	63	34	13	0	0
140	3.5	22	13.5	17	43	46	35	27	14	4.5	2
260	1	9	8	11	15	16	21	9	6	0	0
261	1	11	11	12	22	24	28	11	6	0	0
	63.5	246	173	233	344.5	270.5	276.5	156	60.5	9	5

[234] The breakdown for the individual pieces is as follows:

	G	*A*	*B*𝄳	*c*	*d*	*e*	*f*	*g*	*a*	*b*♭	*b*𝄳	*c'*	*d'*
18	0	5	3	2	11	5	12	18	24	2	1	5	0
50	0	0	0	0	4.5	3.5	8.5	7.5	8	0	0	0	0
135	0	5	5.5	15.5	14	23	23	15	9	0	5	3	2
136	3	23	9	21	15	20	17	11	8	0	0	0	0
137	5	21	10	17	24	24	34	21	30	6	0	0	0
138	0	5	11.5	16.5	32.5	24.5	14	0	0	0	0	0	0
139	0	10	19	26	45	33	24	27	29	8	1	1	1
140	0	5	3.5	2.5	4	7	11.5	16	19.5	0	20.5	20	8
260	0	6	2	2	3	2	4	19	13	0	5	4	0
261	2	6	5	4	5	8	12	12	15	3	0	0	0
	10	86	68.5	106.5	158	150	160	146.5	155.5	19	32.5	33	11



H2 thus maintains remarkably level values over the *d - a* pentachord, in clear contrast to the distribution in the previous display, where there is a peak on *d* and, within the core *A - f* range, the *d - f* segment is salient.

36. acem aşirani
The following pieces are in this mode:

109, 312, 313, 315

and it is also exemplified in 296.

As with 28. buselik aşirani, this terkib is distinguished by Cantemir from its parent mode above solely by the identity of its finalis, in this case defined as *F*. The separate entry for it (p. 52) is also formulated in exactly the same way as that for buselik aşirani and, therefore, adds nothing new, merely confirming that *F* is the finalis and that in both high and low registers its melodic movement resembles that of acem. The symmetry between the two aşirani modes is not, however, complete, for if the name buselik aşirani suggests, correctly, a derivate of buselik with *E* (aşiran) as finalis, the name acem aşirani should likewise point to a derivate of acem with finalis *E*. As two of the four pieces do, indeed, have *E* as finalis, the most likely explanation of the discrepancy is that an original (and terminologically parallel) form with finalis *E* was supplanted under the pressure of the *f - F* octave relationship by one with finalis *F*, to which note the name acem aşirani was also attached (so that a strictly parallel name for the newer form would be acem acem aşirani). In the absence of any significant differences in melodic style between the two pairs the main evidence to be adduced against the equally logical possibility that the development was in the other direction, an original prominent-finalis octave relationship being disturbed by the attraction of other mode pairs in which the finalis notes are a fourth apart (so that Cantemir would be reporting on a previous rather than current state of affairs), is that one of the pieces with finalis *F* is by Angeli, Cantemir's teacher, and hence relatively late.[235] To this may be added that in other modes where more than one layer of development can be detected it has been found that the exemplification in 296 normally reflects the most recent form, and for acem aşirani it provides a sample with, again, finalis *F*.

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[235] The other piece with finalis *F* is by Kanbusu Meḥmed Çelebi, whom Feldman (op. cit., p. 410) places in a group of composers one or two generations before Cantemir, i.e. in the second half of the seventeenth century. But it may be noted that this group also includes Derviş Receb, the composer of one of the pieces with finalis *E*.

On the basis of Cantemir's account one would expect that a presentation of the exposition could be given without serious difficulty in terms of ex. 56, the only significant discrepancy being, inevitably, in the final segment, which consists of a further descent below *A* and the cadence area. Such is broadly the case, although there are one or two details that could not be predicted from ex. 56, such as the initial *g* in 315, and the section-initial leaps in 109 (to *d, f* and *a* in H1, M and H2 respectively) being from *F* rather than *A*. A particularly extended exposition, with a total of 144 time units, is that of 312, which includes, like the lengthy (but not quite as lengthy) expositions of acem in 18 and 140, an exploration of the high register up to *c'*. Its rather shorter but still substantial continuation in M concentrates on a sequential development of the *G - d* pentachord that would be somewhat awkward to capture in terms of ex. 56, but then rises in a predictable fashion to the *f* cadence of Ma, followed by descending sequences in Mb. Within the necessarily divergent concluding material from *A* in descent to the finalis, the pattern that emerges where *F* is the finalis is of a straighforward continuation of the descent giving emphasis to *G* and then *F*. The simplest manifestation of this appears in 296, while 109 provides a variation including in the final elaboration a brief descent to *D*. In 312 and 313, which end on *E*,[236] the same basic shape occurs, except that *F* is omitted from the descent, the final cadence move being *G (A) E*.

With H2 one would anticipate, likewise, that the material could be mapped onto ex. 57. The strongest family likeness is exhibited by 109 which, like several acem subsections, cadences on *f*. It accords prominence to *f* and *a*, rises to *d'*, and includes, under the same conditions as before, the *a b♭ a* flexure. In both 312 and 315 H2b consists of a lengthy sequence beginning on *a* and descending to *A* or *G*, followed by cadence material, but H2a resembles in outline 140 and 150, rising like them to *e'*. Atypical is only 313.[237]

H3 consists in 315 of yet another descending sequence, but in all the others there is a change of pitch set, even if the identity of the mode in question is not always clear.[238]

In the display of relative duration *e♭* is subsumed under *e*, so that we have:[239]

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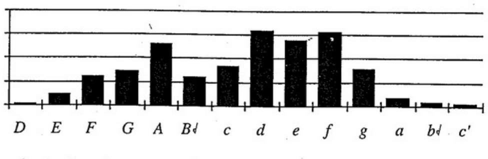
[236] Correcting the error in the final note of 313.

[237] H2a and b fail to explore the upper register and present no more than minor variations of Ma and b, while H2c is a modulation into 30. hicaz changing in the upper register to 33. şehnaz.

[238] 312 H3 has *B* throughout, which should signal 27. buselik, but *e* does not come to the fore at the expense of *f* and *d*, which remain clearly prominent, so that this section might be better identified as 38. acem-buselik. 313 H3a likewise has *B*, and generally resembles buselik more closely; but, like 140 H3a and b, it has finalis *G*, and might be a transposition of 14. çargâh. Both 313 H3b and 109 H3, on the other hand, have *B♭*, which points towards 17. nihavent. However, while the former can be identified as in nihavent or a related terkib, the latter, which gives no hint of a cadence on *G*, has *F* and not *F𝄲*, and remains largely in the lowest register, is much better discussed in terms of an elaboration of elements of H2 (specifically 1 and 4) transposed, like the cadential 5, down an octave.

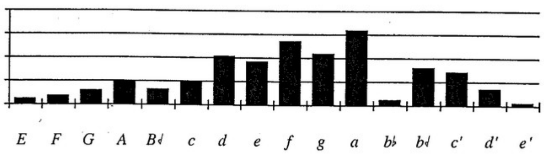
[239] The breakdown for the individual pieces is as follows:

	D	*E*	*F*	*G*	*A*	*B𝄳*	*c*	*d*	*e*	*f*	*g*	*a*	*b𝄳*	*c'*
109	2	2	18	9	9	3	3.5	12	19.5	26	12.5	3.5	0	0
312	0	8	1	19	30	18.5	20	38	32	35.5	20.5	7	6	3.5
313	0	4	0	6	8.5	7.5	8.5	26	20.25	22.25	7.5	0.5	0	0
315	0	0	15	7.5	30.5	10.5	21	23.5	13.5	13.5	9	0	0	0
296	0	0.25	4.25	4.5	5	0.25	0.5	0.75	3	1	0.5	0	0	0
	2	14.25	38.25	46	83	39.75	53.5	100.25	88.25	98.25	50	11	6	3.5



The values for the three lowest notes in acem aşirani hardly exceed the reduction in those for *B𝄳*, *c* and *d* as compared with acem, but the result is still not as even a spread as that exhibited by buselik aşirani. Indeed, we find that the reduction in importance of *B𝄳* and *c* only serves to place in higher relief the surrounding peaks of *d* - *f* and *A*. Particularly noteworthy is the salience of the *d* - *f* segment, which accounts for 45% of the whole.

In the display for H2 only 313 H2a and b are counted. *e♭* is again subsumed under *e*:[240]



However, not only the size but also the nature of the sample here, which yokes together the very different profiles of 109 and 313, means that generalization is hazardous: the impression of a predominant *d* - *a* pentachord, for example, is rather illusory, being borne out by only two of the four pieces, and the display is correspondingly misleading.

37. acem yegâhi

This mode is represented by just one piece, 339. There is no mention of it in the *edvār*, and the assumption must be that the further shift of the finalis down to *D* was in Cantemir's day a quite recent innovation.[241] It is conceivable that acem yegâhi could have resulted from a bifurcation in the evolution that led to acem aşirani, the original *E* being replaced by either *F* or *D*, but it represents in any case the first instance of a trend towards according greater emphasis to the lowest register that would subsequently generate other modal derivates with finalis *D*.

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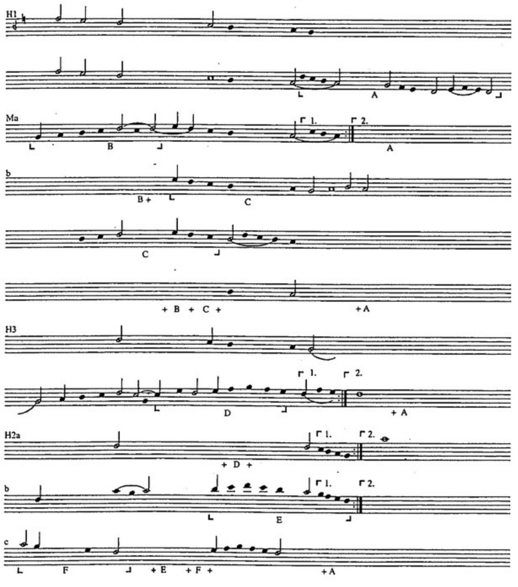
[240] The breakdown for the individual pieces is as follows:

	E	*F*	*G*	*A*	*B𝄳*	*c*	*d*	*e*	*f*	*g*	*a*	*b♭*	*b𝄳*	*c'*	*d'*	*e'*
109	0	1	0	0	0	0	1	2.5	12	11	17	3.5	6	5	1	0
312	4	0.5	7.5	9.5	4	4	6.5	7	9	7	16.5	0.5	6.5	7	5	1.5
313	0	0	0.5	0.5	2	2	13	6	3	1	0	0	0	0	0	0
315	0	5	2	6	5	10.5	15	16	11.5	18.5	21	0	15	12	6	0.5
	4	6.5	10	16	11	16.5	35.5	31.5	45.5	37.5	54.5	4	27.5	24	12	2

[241] Although in 23, probably not quite such a recent composition, H3b (on which see also 2.2.15 (63)) provides an example of a terkib with finalis *D*.

The fact that no indication of authorship is given for 339, either in the heading or the index, has not inhibited modern scholars from attributing it to Cantemir himself.[242] But however justified or unjustified the claim, it is certainly the case that the stylistic indications provided by the relationship of melody to rhythmic cycle point to it being relatively late (and are hence also consonant with the supposition that the mode itself was of recent origin).

There are no modulations in 339 and the upper register is briefly explored in H2b and c only. The exposition consists essentially of a stepwise descent with repetition of the first segment, and the prominence of *d* is reinforced by the greater degree of elaboration accorded to it in M. In order to clarify these and other relationships ex. 58 places H3 after M:



Example 58

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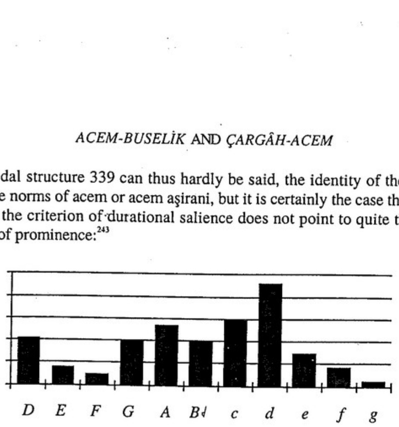
[242] It is the very first piece among Popescu-Judetz's Cantemir notations, and is also ascribed to him by Arel (see notes to Part i), and Y. Öztuna (*Türk musikisi ansiklopedisi*, 1, Istanbul, 1969 (s.v. Kantemiroğlu)).

In terms of modal structure 339 can thus hardly be said, the identity of the finalis apart, to deviate from the norms of acem or acem aşirani, but it is certainly the case that, in comparison with the latter, the criterion of durational salience does not point to quite the same division into two zones of prominence:[243]



Thus while *A* is still evidently important, it is *d* that is easily the most salient note, and *f*, although marked as prominent by being initial, appears only fleetingly thereafter. Such is also the case in H2, where despite the expected salience of *a* its degree relative to the notes flanking it is still somewhat surprising.[244]

38. acem-buselik

There is no mention of this particular combination in the *edvār*, but in the marginal annotations to 22 the name is attached to H2g. In the absence of this example one might have guessed it to be a variant of acem (retaining therefore initially prominent *f*, medially prominent *d* and finalis *A*) in which *B*𝄳 is replaced by the *B* of buselik. But although 22 H2g certainly has finalis *A*, and *B* in place of *B*𝄳, it does not fully match other expectations. Since the preceding mode cadences on *d* the first note of the initial *e f e* flexure could be regarded as no more than a continuation and *f* therefore as initial in the sense that it is the first new feature which will help identify this modulation; but *f* does not reappear thereafter, and *c* is, if anything, more prominent than *d*. Rather better candidates would appear to be 110 H3 and 312 H3, both of which fulfil all the desired criteria, while a less likely one is 140 H3c.

39. çargâh-acem

Here the reverse is the case: this combination is nowhere named in the notations, but is mentioned in the *edvār*. In relation to the modal norms of Cantemir's day, when the variant of 14. çargâh with *f* seems to have been preferred, a possible equivalent to this designation would be a structure in which *c* and *f* were prominent and *A* the finalis (in contrast to the *c* of çargâh). To arrive at this from acem involves no more than a shift of emphasis from *d* to *c*, and it could thus readily occur as a local episode, especially among the more fluid modal conditions that normally obtain in H3. One subsection which corresponds fairly well to this definition is 135 H2a, while another, if less strong, candidate would be 153 H3a, which has finalis *A* and initial (and prominent) *c*, but fails to include *f*. However, all this is highly speculative: Cantemir's reference to çargâh-acem (p. 69) comes in the material taken from earlier authorities, and by the late seventeenth century it may well have ceased to exist.[245]

2.2.8 *The ırak group*

There now remains for examination the final, but largest, block of modes, which consists of those classified as main-note modes, together with their satellites. In the *edvār* Cantemir orders the main-note modes according to the finalis, working up from the lowest, so that he begins with ırak, followed by rast. Here the order is changed somewhat in order to take account of modal relationships, so that along with ırak we may consider not only its derivates but also the main-note mode most closely related to it, eviç, which likewise has *F*♯ as finalis.

40. ırak

The following pieces are in this mode:

7, 8, 30-5, 129, 130, 134, 144, 194, 195, 229, 250-4, 298, 299, 303, 305-7, 353

Of these 298 is identical with 134, even if notated with slightly different conventions and ascribed to a different composer, and 307 with 144, so that the total number of pieces is 25. Exemplification is also provided in 22 and 296.

Cantemir's account of ırak (p. 23) begins by defining the eponymous note, *F*♯, and goes on to state that it is through this pivotal note that ırak is manifested, whether beginning from *D* and *E* or, alternatively, descending from *A* and *G* to finalis *F*♯.[246] The following expansion adds no more than that one can ascend from *F*♯, using main notes, up to *e'*[247] and return in the same way to finalis *F*♯. The modulatory family is said to consist of sultani ırak, muhalif ırak, rahat ül-ervah and ru-yi ırak among the 'used' terkibs, and of zirkeş-haveran, beste ısfahan and musikar among the 'unused' ones.

The account of ırak itself is thus couched in very general terms, and defines little save the

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[243] The breakdown for the various sections is as follows:

	D	*E*	*F*	*G*	*A*	*B*𝄳	*c*	*d*	*e*	*f*	*g*
H1	6.5	2.5	1.5	3.5	5	1.5	5.5	8.5	6.5	6	1
M	13	5	3	13	23.5	18	17	28.5	5	2	0
H3	6.5	2.5	1.5	9	5.5	5.5	15	22	7.5	3	2
	26	10	6	25.5	34	25	37.5	59	19	11	3

[244] The figures for H2 are as follows:

D	*E*	*F*	*G*	*A*	*B*𝄳	*c*	*d*	*e*	*f*	*g*	*a*	*b*𝄳	*c'*	*d'*
6.5	2.5	1.5	3.5	3	1	4	31.5	8.5	4	9	24.5	6.5	3	3

[245] It should also be noted that although there is no description of cargâh-acem Cantemir comments later (p. 76) that such combinations had finalis *E*.

[246] مقام مزکور کندو پرده سنی قطب ایدوب یکاه پرده سندن اغازه وحرکت ایدر ایسه تمام پرده لر ایله عشران چقوب کندو پرده سنده کندوی اظهار ایدر وکنه تعریف مفرد اوزره دوکاهدن اغازه وحرکت ایدر ایسه راست پرده سنه اینوب عراق پرده سنده قرار ویروب استراحت ایدر .

[247] The text includes the phrase *nezāket-i terākīb üzere* ('according to the subtlety of the combinations'):

پرده ءِ مرقوم دن تیزه چقمق مراد ایدر ایسه تمام پرده لر ایله نزاکت تراکب اوزره تیز حسینیه دکن چقمق حکمی واردر .

but it is not wholly clear whether this implies conformity with modulatory requirements or, perhaps more likely, no more than respect for the consonant relationships between the various main notes. The remark does not reappear in any other mode description.

pitch set and the finalis. From the reference to ascent from *F♯* it does not necessarily follow that Cantemir meant to identify it as the initial, but if so he would have had greater justification than in many previous cases where an initial note is specified, for in ırak the great majority of pieces do in fact begin from *F♯*. On the other hand, part of what he does say fails to find an echo in the repertoire, for the upper limit of the register is often no higher than *a* (sometimes accompanied by an *a b♭ a* or *a b𝄳 a* flexure), and there is no excursion up to *e'*.

Nor, apparently, is it the case that the finalis is invariably *F♯*, for in 34 both H1 and M cadence on *A*. However, given that ʻAlī Ufḳī defines its mode as 43. muhalif ırak,[248] the question arises as to whether this piece, and possibly others too, should not more properly be assigned to a member of the modulatory family than to ırak itself. Here certain complications arise: for Cantemir, having a different finalis is not one of the criteria marking off muhalif ırak: the distinction has to do, rather, with the initial resemblance of muhalif ırak to 25. saba, precisely the characteristics exhibited by the exemplification of muhalif ırak in 296, with the concomitant inclusion of *d♭*. But it has been seen that the presence of *d♭* is not an absolute requirement for saba, and even in its absence from 34 one can still point to the saba-like prominence of the *A - c* segment as against that of *A - d* in ırak. It therefore appears legitimate to consider 34 under muhalif ırak and assume, provisionally, that it represents a stage during which the final cadence of this combination of ırak and saba was supplied by the latter, whereas as manifested in 296 (and Cantemir's description) this had been supplanted by an ırak cadence. This later stage also appears to be represented by H1 in 31, 35 and 229, but as the remainder of these pieces is more readily accounted for in terms of ırak there are insufficient grounds for grouping them together with 34, especially as 35, the only one of the three included in ʻAlī Ufḳī's collection, is also considered by him to be in ırak. Nevertheless, these examples do suggest that the incorporation of muhalif ırak (although not, apparently, of other members of the modulatory family) might occur at an earlier stage than is normal for modulations, and we find, indeed, further instances elsewhere.[249]

There is one other piece with *A* as finalis, 30. But H1 provides no further grounds for deferring consideration, especially as H1a cadences on *F♯*, and ʻAlī Ufḳī also assigns the piece to ırak. Although a later redesignation in the light of changing modal discriminations is not thereby excluded, reference to the exemplification in 296 of ısfahan-ırak and sultani ırak, both with finalis *A* (and the latter a member of the modulatory family), fails to suggest an affinity with either, so that 30 simply has to remain as a rogue example of ırak with finalis *A*.

The postponement of 34 leaves 24 pieces to consider. Even so, ırak provides the largest sample yet encountered, and the presentation of the exposition may best be handled by splitting it into two sections, the first of which, always completed within H1 (although in 305 there is a second stage in M), establishes the two most prominent notes of the lower register, *F♯* and *A*. Ordering by number is again abandoned in favour of juxtaposing motivic affinities, and a separate group is established for those pieces, 252 and 254, in which this first section cadences on *A*. Because of the different modal identity of H1, 31, 35 and 229 are omitted. Ex. 59 is followed immediately by ex. 60, with a number of continuations.

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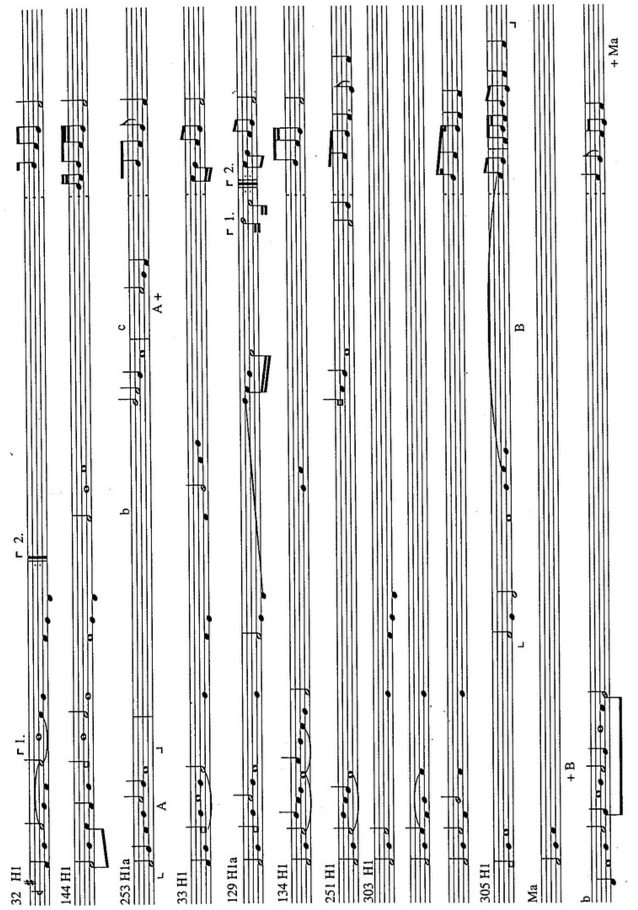
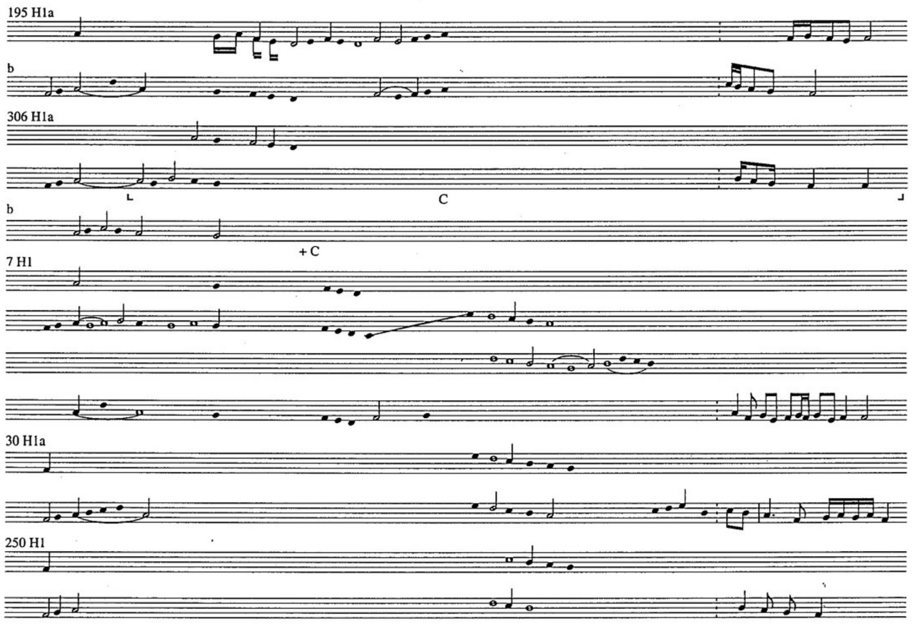
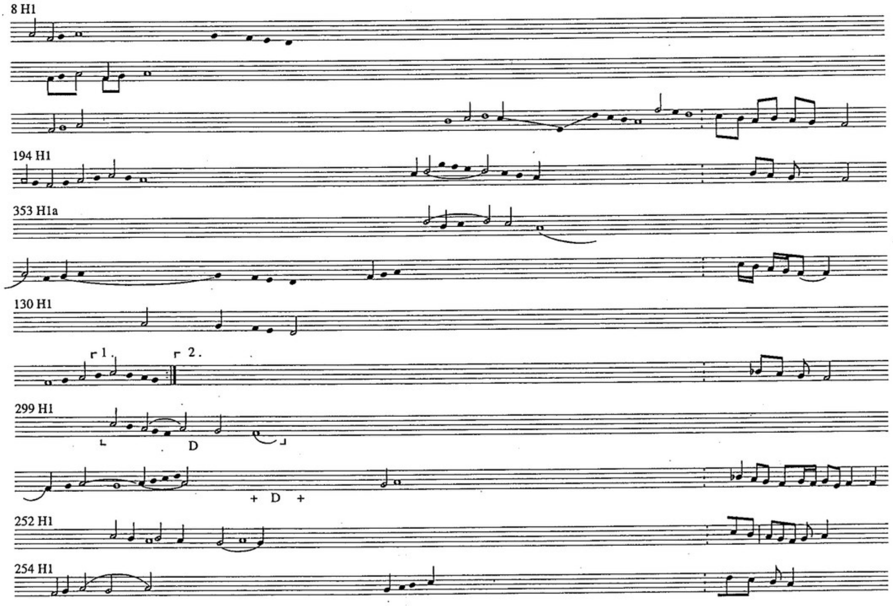
[248] ʻAlī Ufḳī's formulation is (the completely equivalent) ırak-ı muhalif.

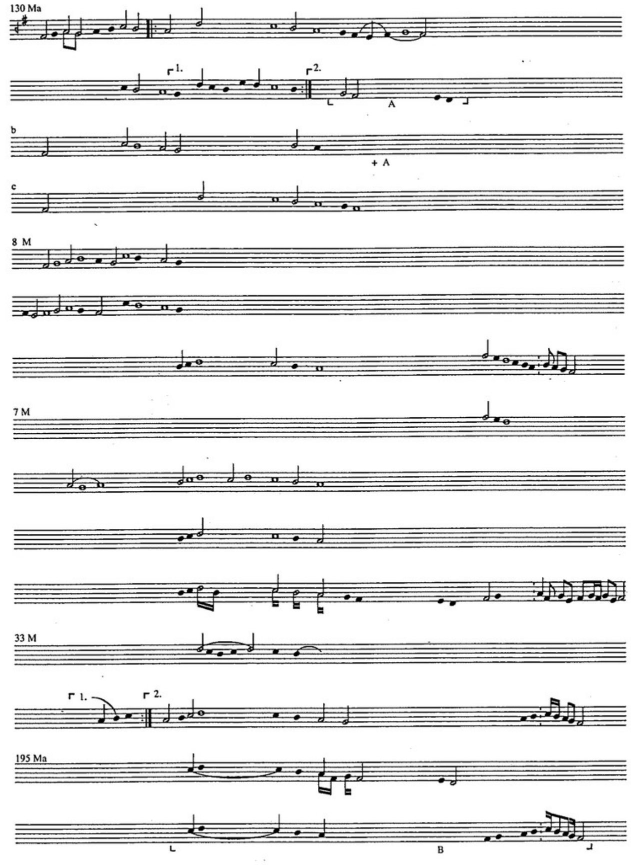
[249] Material classifiable as muhalif ırak also occurs in M in 30, 129, 144, 194 and 299.



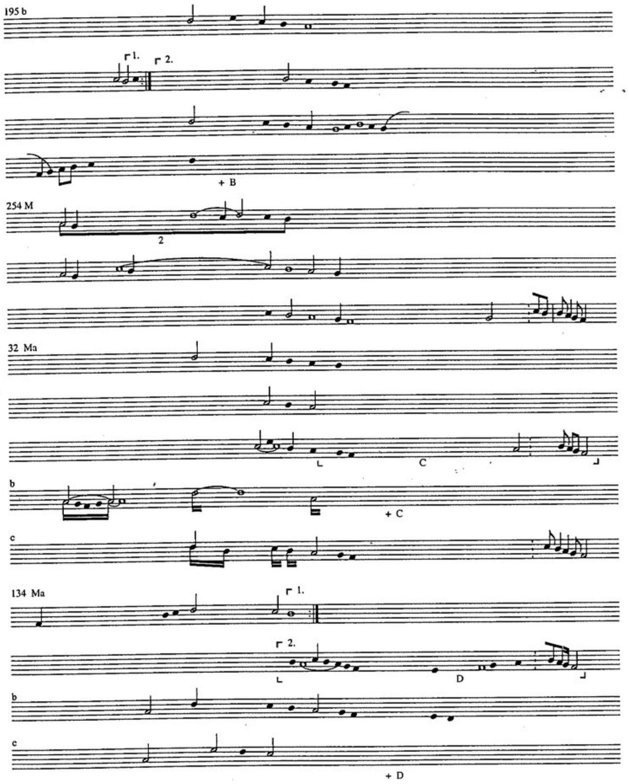

195 H1a
b
306 H1a
C
b
+ C
7 H1
30 H1a
250 H1


8 H1
194 H1
353 H1a
130 H1
1.
2.
299 H1
D
+ D +
252 H1
254 H1

Example 59



130 Ma
1.
2.
A
b
+ A
c
8 M
7 M
33 M
1.
2.
195 Ma
B



195 b
1.
2.
+ B
254 M
2
32 Ma
C
b
+ C
c
134 Ma
1.
2.
D
b
c
+ D

Example 60

The dominant pattern in ex. 59 is fairly clear. *A* is occasionally initial, but in the great majority of cases it is approached from *F♯*, and is then elaborated, either below (concentrating on the *F♯* - *A* trichord) or, rather more frequently, above (concentrating on the *A* - *d* tetrachord), with an optional following descent to *D*. It is rare, however, for this note to be accorded any prominence, and only in 195 is there elaboration of the *D* - *F♯* segment of the *D* - *A* pentachord. The cadence area may then be approached by a brief ascent, usually from *F♯*, but in a number of pieces there is a further element, sometimes approached by a scalar ascent from *D*, consisting of a descent from *d* to *A* which tends to be repeated rather than elaborated. The mahur-type cadence appears in three pieces, but more common is a stepwise descent from *B𝄳* or *c*. The substitution of *B♭* for *B𝄳* in the cadences of 130 and 299 occurs in the context of an *A B♭ A* flexure (a feature endemic in 299) and, to judge by its appearance in 296 not only in the cadence of ırak but also in that of the related 3. rahat ül-ervah, was a recent development of increasing frequency, underlining yet again the primacy of the *F♯* to *A* relationship over the *F♯* - *B𝄳* perfect fourth.

The second section, presented above in ex. 60, concentrates more on the middle register, adding *d* to the roster of prominent notes. This occurs already in 30 H1b, before Ma veers off towards muhalif ırak, but elsewhere its normal position is within M, and if we exclude material which can be classed as modulatory[250] the variations encountered may be grouped according to how far up the melodic centre of gravity moves. In the first group *d* (± *e*) is the highest point, and there may be further development of the lower register before it is reached; there is little elaboration of *d*, and it is characteristically followed by a descent to *A* which may sometimes continue to *F♯* or even *D*. The hint of a triadic (*A c e*) base encountered among these piece, faint in 32 and a little more open in 134 Mc, may be construed as pointing towards a modal shift.

Elsewhere we may find a simple extension of the type of development displayed in ex. 60:[251] the area around *d* becomes more prominent, being enlarged to allow for a greater degree of elaboration above (reaching *g* in 303), and there may be secondary emphasis on *e*. Here the differences are insufficiently marked to require illustration. But if the shift from these pieces to 31 is again no more than one of emphasis, the resulting material is now at a certain remove from the first group and may usefully be displayed in outline, together with that of the remaining pieces. As ex. 61 shows, for the most part these resemble 31, and thus represent a further development within the same continuum involving multiple elaborations of the area around *d*, often with a descent to *A* followed by varied repetition of preceding material before the eventual descent to the *F♯* finalis. In 35 the elaboration includes a jump to *a*, and the same piece also uses the formula *d g f♯ e d*, but elsewhere *f♯* is the highest note, except in 252. Here *a* again appears, but the context is different, for it may be viewed as an extension of the triadic (*A c e*) base already observed in 32 and 134 (and which is also exhibited by the beginning of 129 H1b). But rather than a variant development within the modal orbit of ırak, it may be suggested that this represents a modulatory excursion in the

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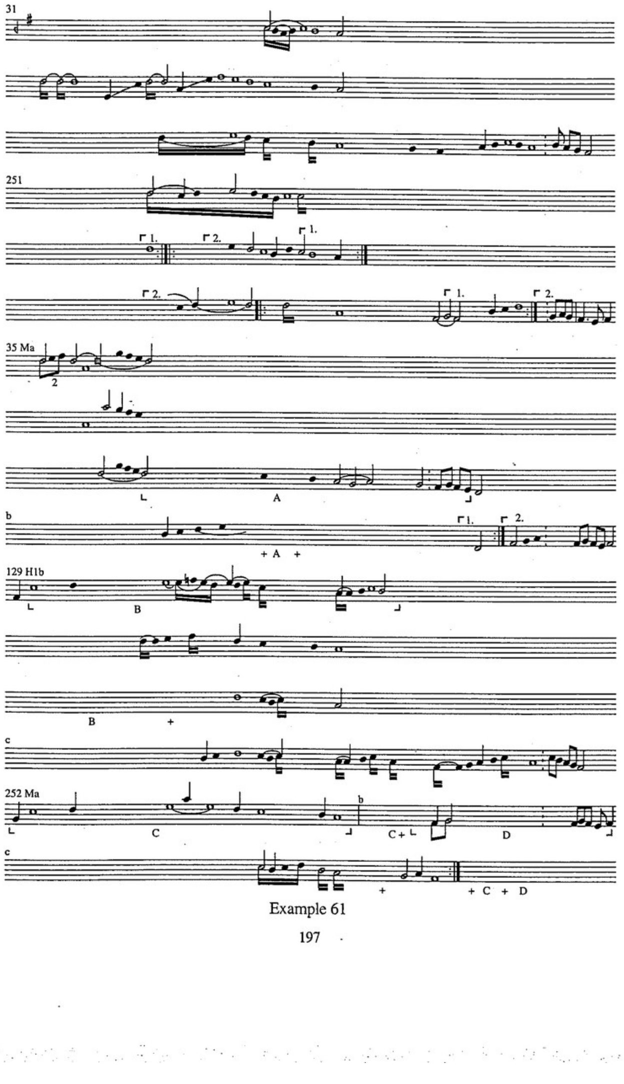
[250] 30 Ma, 129 M, 194 M and 299 M, examined below under muhalif ırak, 144 M (saba), and 305 Mc which, despite the substitution of *B♭* for *B𝄳*, should presumably be assigned to 34. nigriz.

[251] As in 30 (H1b), 229, 253, 303 and 306.



Example 61

direction of 58. hüseyni.[252]

Omitted from the above survey is 250 M. This jumps abruptly, after a brief lower-register continuation, to *f♯*, with no intermediate stage focused upon *d*, and then proceeds to develop the upper register, rising to *c′*, thereby anticipating what one would predict to occur normally in H2. In most cases, however, H2 is characterized less by the exploration of a markedly higher register (*a* often being the upper limit) than by a further shift up giving emphasis to *f♯*, so that there is an underlying first inversion triadic structure: *F♯ A d f♯*, a particularly clear encapsulation of which is provided by 306 H2a. Occasionally prominence is also accorded to *a*, as in 31 H2b,[253] but this expected further extension upwards is more frequently absent and in some cases, indeed, the development of the area around *f♯* is quite brief, emphasis soon switching back to *d*.[254] The only other case in which, like 250, the upper register is developed up to *c′* is 144, but this is, if anything, even more exceptional, for H2 is a literal repeat of H1 at the octave. As H2 in the later version of this piece, 307, transposes H1 not to *f♯* but to *d*, and in so doing preserves the earlier form recorded by ʻAlī Ufḳī, it is tempting to regard 144 H2 as an aberration, either an experimental and unsatisfactory development swiftly abandoned before memory of the original form had faded, or even a simple mistake on Cantemir's part; but a more likely, if prosaic, explanation is that Cantemir obtained the two versions from different sources and that the contrasts between them were the product of different lines of transmission.[255]

A particularly common feature in the initial stages of H2 is the use of *c‡*. If it only appeared as exemplified in 7, 254 and 303[256] it could be dismissed as nothing more interesting than the standard flexure *d c‡ d*, but in addition to observing that in the absence of any comparable example of *d c d* it would need to be deemed, unusually, an obligatory feature, it is clear that its function sometimes transcends that of the flexure, in which context one would expect it neither to have a duration exceeding that of the flanking notes nor to occupy a positionally prominent node. In 31, for example, it has a duration greater than that of the flanking *d*s, while in 32 it does not even form part of a flexure, being initial (but without recurring). The remaining cases in which it appears may be presented as follows, tracking H2(a) where possible as far as the eventual substitution of *c*:[257]

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[252] To which may be added that in the case of 252 the prominence of *c* continues in H2, where there is a modulation into muhalif ırak.

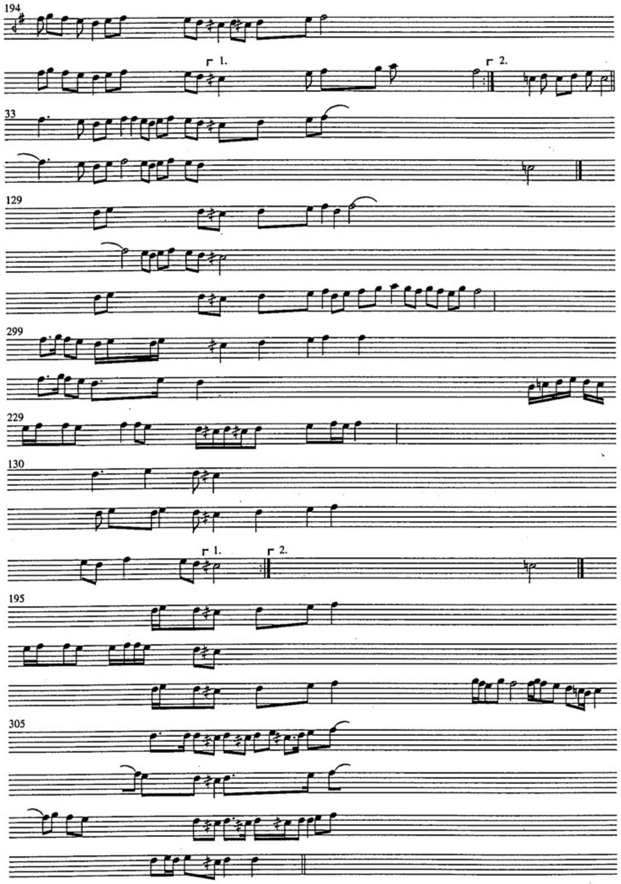
[253] And also in 35 and 134, where it is, however, the highest pitch used (noteworthy is 35 H2c, which consists of just *a f♯ d A* repeated); and, albeit to a markedly lesser degree, 229, 251, 303, 306 and 353.

[254] While in 30 H2a it is non-existent, the centre of gravity reverting to *A*. Much of the H2 material that does centre on *f♯* is akin to the exposition of 44. eviç, with which it is juxtaposed in ex. 65.

[255] Cantemir's first index (p. 105) points towards this conclusion: 144 is in the *mevcūd* column, 307 in the *nā mevcūd* column, so that at the time of compilation this version was not known to him (and the only common element between the two entries is the rhythmic cycle, so that he must have assumed that the unknown 307 would be a different composition).

[256] In common with further instances in 35 H1c, 129 H1b and 250 M.

[257] Or, where this does not occur, either to the end (as in 305) or to the first prominent *f♯* beyond the passage containing *c‡* (as in 129 and 229, after which comes an upper-register passage followed by a cadence on *f♯*).



Example 62

Of these 130 and 305 have already been mentioned in connexion with 1. hüzzam, and even if among the others only 129 gives comparable emphasis to *c♯* as a temporary cadence there is a general resemblance that is too pronounced to be fortuitous. Particularly significant in these passages is that for the most part the melody does not rise above *f♯*, and where g appears it is usually in the context of an *f♯ g f♯* flexure, so that despite the fact that hüzzam is not included by Cantemir among the members of the modulatory family of ırak it may be suggested that just as a modulatory shift to saba was a standard gambit, so too was a brief allusion to hüzzam in the context of the transfer of prominence to the *d* - *f♯* segment at the beginning of H2. Also characterized by an initial *f♯* → *c♯* descent is a terkib that is listed within the modulatory family of ırak, 3. rahat ül-ervah, but as it would appear that at the least an ensuing descent to *G* was required for it to be established the case for identifying its presence here cannot be made.

After H2 we find, in the absence of a modulation, a variety of approaches, although the most common is the expected return to the lower register.[258] However, H3 in 8, 30 and 253 covers the *F♯* - *f♯* octave, while an even wider range (*E* - *a*) is encountered in 250 and 252, both of which revert to ırak after a modulation in H2.[259] Rather unusually, 306 H3a continues the high register of H2, but H3b both provides lower register contrast and modulates.

Here, as often elsewhere, saba is involved. In some cases identification is straightforward,[260] but in others a beginning or first subsection in saba is followed by a continuation in ırak with final *F♯*,[261] and here it would seem more appropriate to regard the two as forming together a modulation into muhalif ırak. Among the other modulations the hicaz group is, as usual, well represented,[262] and so, too, is 45. segâh.[263] However, as with the saba → muhalif ırak modulation, segâh is followed in 35, 251, 254 and 305 by a continuation in ırak with finalis *F♯*, and although in at least one case this is little more than a perfunctory tacking on of pre-existing cadence material it is pertinent to note that together the two elements correspond to the description provided by Cantemir of 47. ru-yi ırak, and as this is listed as a member of the modulatory family of ırak it seems appropriate to detect its presence in these four pieces. A further member of the family, rahat ül-ervah, occurs in 7 H3.[264]

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[258] This occurs in 7 Z, 8 Z, 32 H3 and 35 H3b.

[259] To 30. hicaz/33. şehnaz in the former and to muhalif ırak in the latter.

[260] As in 129 H3, 130 H2b and 134 H3. A slight complication appears to be provided by 130 H3 (b), where another such example is labelled kuçek, but this shows no more than that because of the large measure of overlap between these two modes the name kuçek could be invoked even in the absence of the initial descent that properly differentiates it. (The final descent to *F♯* is here irrelevant, being a simple bridge to the beginning of M.)

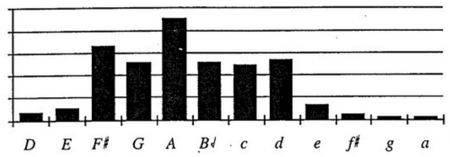
[261] As in 31 H1b, 33 H3, 144 H3, 252 H2, 306 H3b, 299 M (with a varied repeat in H3).

[262] Occurring in 250 H2, 305 H2b, and in H3 in 34, 194, 229 and, fleetingly, 305 and 353.

[263] It appears in H3 in 35, 195, 251, 254 and 305, while in 303 its introduction in H3b follows what can be identified as a modulation into 14. çargâh in H3a.

[264] Finally, the appearance may be noted of 58. hüseyni (in 31 H3 and 252 H3b) and, in 30 H2b, of what seems to be 19. nişabur, even if there is no hint of a cadence on *B*. After continued exposition of ırak in H2a, this rather complex subsection begins with a modulation into hicaz, introduces *B* in place of *B𝄳*, and then repeats the first two cycles with this new pitch set. It then switches to the main-note pitch set of ırak (8-15), and the whole is repeated, but with the original modulation into hicaz being replaced by nişabur.

Omitted from the following display of relative duration are those pieces (30, 31, 35, 129, 144, 194, 229 and 299) in which significant portions of H1 or M may assigned to muhalif ırak, or modulate elsewhere. Selection from among the remainder has been arbitrary, although the great majority are in fact included. Both H1 and M are included for each piece chosen (except 353, where there appears to be no M). *G♯* is subsumed under *G*, *B♭* under *B𝄳*, *c♯* under *c*, *d♭* under *d* and *f* under *f♯*. *C* (one time unit in 7) and *b𝄳* and *c'* (three time units each in 250) have been omitted, so that we have:[265]



This confirms most of the points made above, but more even than the obvious salience of the finalis it shows the marked predominance of *A*. Also evident is the importance of the *A* - *d* tetrachord; the steep reduction in the percentages for the notes above *d* (so that *e* and *f♯* together carry no more weight that *E* and *D*, a clear indication of bias towards the lower register); and the *F♯* - *A* - *d* triadic emphasis.

One may compare with this profile that of the companion display for the following higher (that is, mid to higher) register passages in H2 in the same pieces.[266] In 306 H2b only the seconda volta is counted. *c♯* is subsumed under *c*, *f* under *f♯* and *b♭* under *b𝄳*. *C* (one time

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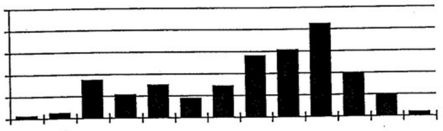
[265] The breakdown for the individual pieces is as follows:

	D	*E*	*F♯*	*G*	*A*	*B𝄳*	*c*	*d*	*e*	*f♯*	*g*	*a*
7	5	9	27	21	36	25	22	23	4	3	0	0
32	1	1	26	24	45	14	13	14	2	0	0	0
33	0	1	13.5	9.5	24	13	14	20.5	4.5	0	0	0
130	6	6	38.5	35	49.5	28	18	10	1	0	0	0
195	9	10.5	35	16	26	13.5	13.5	14.5	2	0	0	0
250	0	2	14	9	17	15	13	8	5	10	6	9
251	0	2	21	11	17	14.5	33.5	43	14	0	0	0
253	0	0	11	10	24	16	19	23	4	1	0	0
303	1.5	1	24.5	18	29.5	21	11.5	8	2.5	2	0.5	0
306	2	6.5	30	31.5	62	31	20.5	31	7.5	2	0	0
353	1.5	0.5	10.5	8	15	5	7.5	6.5	1.5	0	0	0
	26	39.5	251	193	345	196	185.5	201.5	48	18	6.5	9

[266] Except for 130 and 250, in which H2 modulates (and likewise 353 [H2b]), but including the hüzzam-like material in 33 and 195.

unit in 7) has been omitted, so that we have:[267]



This demonstrates equally clearly the shift of focus in H2. It is possible to discern residual emphasis on the triad (*F♯* - *A* - *d* - *f♯*), now dominated by *f♯*, but the importance of *A* is drastically reduced: in place of the *A* - *d* tetrachord it is now the *d* - *f♯* trichord that is predominant (accounting for 40% of the whole), and the salience of *f♯* is quite pronounced, despite the rapid tailing off in the notes above.

41. sultani ırak
42. ısfahan-ırak
Both are exemplified in 296, and there is in addition a piece in sultani ırak, 290, by Cantemir himself. He describes this mode (p. 54) as beginning like 16. ısfahan, descending on main notes to *F♯*, and then ascending on main notes to its finalis, *A*,[268] and a similar account is contained within his taksim outline (see 2.4.1), where it is said to begin like ısfahan, and to have initial *F♯* and finalis *A*. Unfortunately, there is no description of ısfahan-ırak, and were it not for the appearance of both in 296, where ısfahan-ırak follows muhalif ırak and precedes sultani ırak, it would be tempting to conclude that they were probably alternative designations for the same modal entity.

267	*D*	*E*	*F♯*	*G*	*A*	*B𝄳*	*c*	*d*	*e*	*f♯*	*g*	*a*	*b𝄳*
7	4	5	12.5	7.5	8	4	5	13	11	9	7	1	0
32	0	0	7	6	10	3	6	13	21	37	25	12	0
33	0	0	5	3	4	2.5	8.5	8.5	11.5	17	0	0	0
195	0	0	4.5	2	2.5	3.5	8.5	10	9	13.5	2.5	0	0
251	0	1	8	6	6	5	7	5	6	17	10	6	1
253	0	1	7	3	6	5	4	10	14	15	5	2	0
303	0	0	7	3	4.5	3	3	5	11.5	12	4	4.5	2.5
306	0	0	3	0	3	0.5	2	19.5	10.5	14	7	4	0.5
353	0	0	3	3.5	5	2	3.5	7.5	5.5	5.5	2.5	3.5	0.5
	4	7	57	34	49	28.5	47.5	91.5	100	140	63	33	4.5

Perversely, of the exemplifications offered in 296 it is the one labelled ısfahan-ırak that better corresponds to Cantemir's description of sultani ırak. Indeed, despite the necessary compression, dictated by the two-cycle format, of its references to the various features of a complex structure, it provides a fairly full illustration: after an initial descent through the hicaz tetrachord on *A*, *c♯* is replaced by *c* (sufficient, in context, to provide an allusion to 25. saba, even in the absence of *d♭*, which is specifically mentioned in the description of ısfahan), and there is then a descent to *G*, the elaboration of which includes *F♯*, all within the first cycle. The second then jumps to *d* and descends to *A*, and in this last feature may be said to diverge somewhat from Cantemir's account, with its implication of a final ascending *F♯ G A* core. In contrast, the immediately following outline of sultani ırak contains no hint of ısfahan whatsoever: it has the same final descent to *A*, but could happily be integrated within a piece in 40. ırak, provided only that it was not section-final.

Considered in isolation, this mismatch suggests the possibility that Cantemir might inadvertently have assigned the wrong mode name to his description. But that such cannot have been the case is demonstrated by the fact that, just as with ısfahan, Cantemir's own composition in sultani ırak, 290, is faithful to the outline he supplies. To be pedantic, one could say that H1 initially suggests 30. hicaz rather than 31. uzzal (and also that Mc begins by hinting at 34. nigriz), but it then descends to *F♯*, and an *F♯ G A* ascent does indeed supply the core of the cadence. Ma covers the same ground, and midway through Mb we encounter the prescribed introduction of *c* and *d♭*, and there is a further excursion into saba in H2. But if, on this evidence, there is nothing amiss with Cantemir's description of sultani ırak (nor, we may assume, with his understanding of which mode is which), the natural conclusion would be that it is, rather, the names in 296 that have been wrongly assigned. Here, however, one returns to the problem that the sample to which the label sultani ırak is attached does not appear to be related to ısfahan at all, so that it would seem wholly inappropriate to give it instead the designation ısfahan-ırak, and in the absence of further evidence the relationship between them remains a conundrum.[269]

Example 63 displays both the sultani ırak and ısfahan-ırak material in 296 together with H1, M and H2 of 290. As noted above, the initial material in 290 is echoed in the ısfahan-ırak of 296 rather than in sultani ırak, but thereafter the general profile of the latter is reasonably close to that of 290 Mb. In 290 the emphasis on the upper register, which is only developed in H2a, is markedly less than in 278, Cantemir's composition in ısfahan (ex. 28): after initial elaboration of the area around *f♯* the melodic focus soon descends, and in H2b and c is centred on *A*.

As in other pieces by Cantemir, the modulation in H3 is quite difficult to pin down: the opening is unusual in its very low register, and in another context might have served as a cadence on *D*, but thereafter, although there are hints of 58. hüseyni, it seems more likely that H3 should be placed under the general rubric of 55. uşşak.

In the following display of relative duration *c* and *c♯* are given separate entries because of

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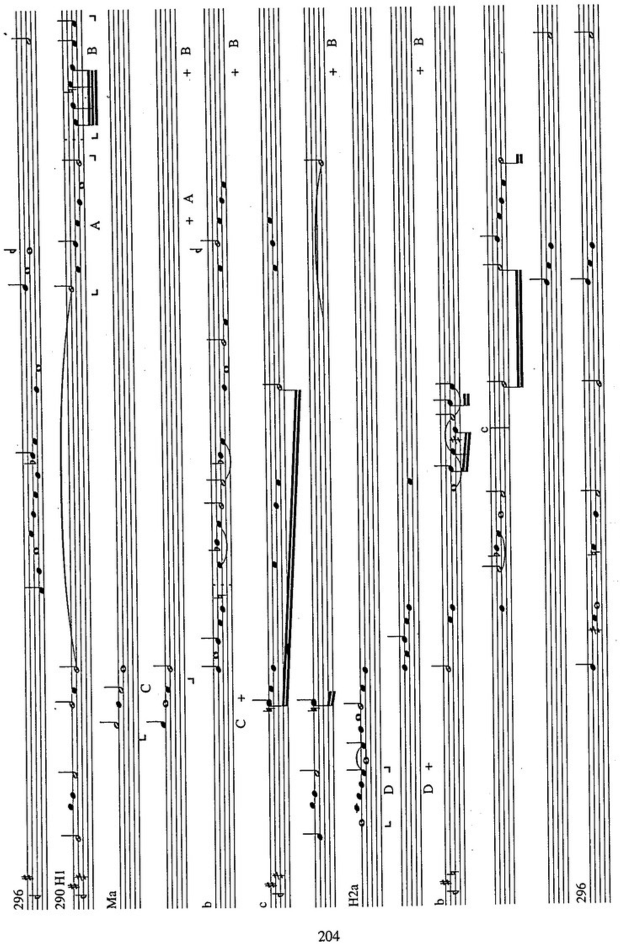
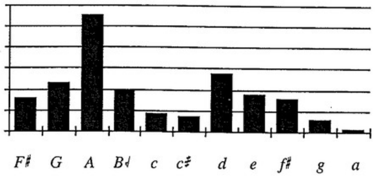
[268] The same outline is given (p. 77) within the *edvār-ı ḳadīm* material. Despite this there is an amusing marginal note in a later, anonymous manuscript (Ankara İl Halk Kütüphanesi GK 131/2, fol. 5r) which claims that the finalis was formerly *F♯* (*ḳavl-i ḳadīmda ʿırāḳ ḳarār eder*), but that Cantemir one day mistakenly concluded with *A* and was obliged to buy the silence of the listening experts, to whose objections he was unable to reply. (I am obliged for this reference to Cem Behar, who considers the manuscript in question to be mid-eighteenth century.)

[269] Within the extended taksim outline that Cantemir later provides we find (p. 66) the sequence ısfahan→ muhalif ırak→sultani ırak, but there is no ısfahan-ırak.



Example 63

the overlap with ısfahan, but *d*♭ is subsumed under *d*, *f* under *f*♯, *B*♭ under *B*𝄳, and *G*‡ under *G*.[270]



For the most part, these values differ little from what might have been predicted from the figures for 16. ısfahan. There are again pronounced peaks on *d* and *A*, although even with the lower centre of gravity resulting from the descent to *F*♯ the extent to which the salience of *A* exceeds that of *d* is rather surprising. On the other hand, the previous profile is mirrored closely in the scaling down above *d* and, particularly, in the relatively low values for the notes between *A* and *d* (and even if *c* and *c*‡ were put together as a composite entry it would still be lower than *B*𝄳).

43. muhalif ırak

In Cantemir's pithy summary (p. 54) muhalif ırak is defined as being exactly like 25. saba in its melodic development, but then descending to finalis *F*♯.[271] No complete piece is assigned to this mode, and in fact its name only appears once, being attached to a subsection in 296 H4, which is set among a group of ırak-related modes and illustrates the definition perfectly. In the light of the discussion of 40. ırak it would appear that a quite good case can be made for assigning to muhalef ırak the following material: 34; H1 in 31 and 229; 35 H1a and b; M in 129, 144, 194 and 299 (with a varied repeat in H3); 30 Ma; 252 H2; H3 in 33 and 144; and 306 H3b. 34 H1 and all the remainder, regardless of position within the piece, may be regarded as exposition and can therefore be displayed together.[272] Instances of the saba formula closely resembling those given in ex. 41 (and including ones with *d* in place of *d*♭) are indicated in ex. 64 simply by the letter S, with a natural or flat above to indicate the use of *d* or *d*♭ respectively.

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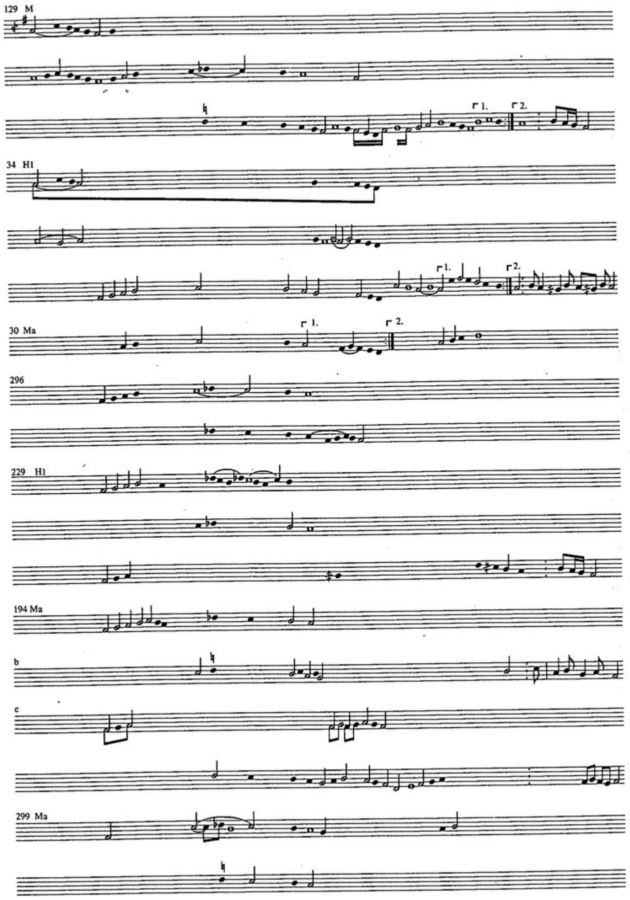
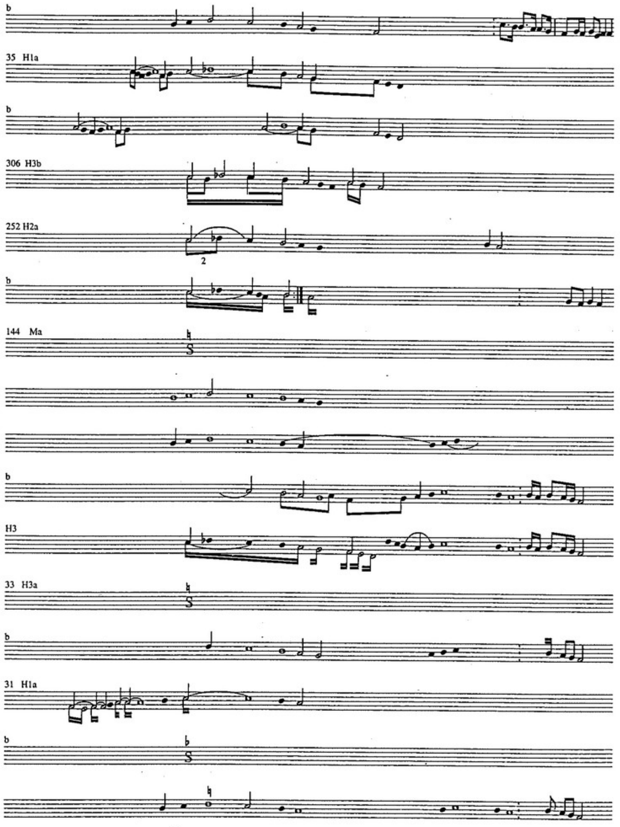
[270] The breakdown for the individual sections is as follows:

	F♯	*G*	*A*	*B*𝄳	*c*	*c*‡	*d*	*e*	*f*♯	*g*	*a*
296	3.5	2	7.5	3	2.5	0	3	0	0	0	0
290 H1	2.25	2	5.5	2	0.25	0.5	8.75	3.75	2.5	0.5	0
M	8.5	14.75	19.5	9.5	3	3.5	14.5	12.25	6.75	5.25	0.5
H2	4.25	7.5	31.25	8.5	4.5	4.75	7.25	4.25	9	1.5	1.25
	18.5	26.25	63.75	23	10.25	8.75	32	20.25	18.25	7.25	1.75

[271] مخالف عراق تمام صبا مقامك حركتنى ايلدكدنصكره كلوب عراق پرده سنده قرار قلر .

[272] With the abstract of 299 ending at the cadence in Mb, so that Mc is omitted.

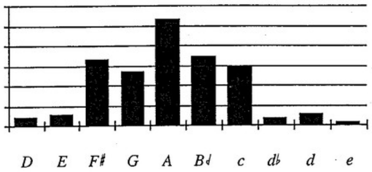

129 M
1.
2.
34 H1
1.
2.
30 Ma
1.
2.
296
229 H1
194 Ma
b
c
299 Ma


b
35 H1a
b
306 H3b
252 H2a
2
b
144 Ma
b
H3
33 H3a
b
31 H1a
b

Example 64

In broad terms this material corresponds to Cantemir's description, so that the part preceding the descent to *F♯* bears some likeness to the parallel abstract of saba in ex. 42, with the core common features of the prominent *A* - *c* segment, the frequent appearance of the *c d♭ c* flexure and the later substitution of *d* for *d♭* in the descent to *A*. At the same time, however, comparison between the two also reveals a number of differences, suggesting that the equation of the first part of muhalif ırak with saba may be somewhat simplistic. Most obvious is the possibility of beginning in muhalif ırak with an ascent from *F♯*, and even when *A* is initial there is a tendency, particularly clear in 34 and 129, for the area below it to be developed before the ascent to *c*, thus suggesting that proclamation of the relationship with ırak did not have to wait until the characteristic descent in the latter part of the exposition beyond *A* to *F♯*. This may be followed, in a quite orthodox formal pattern, by elaboration of the area around *F♯* and an ascent to *B𝄳*, *c* or *d* before the final cadence, in which a simple descending line predominates. Although 34 is a lengthy and complex piece, the other sections may be dismissed quite briefly. M reverts to a mainstream ırak type, giving more prominence to *d*, but again concludes unexpectedly with the same cadence as H1, on *A*. H2 begins as if reverting to muhalif ırak, giving emphasis to *c*, but then shifts through sequential repetition to *d* and then *e*, which, after repetition of this first block of material, serves to introduce a modulation to 18. hisar, this being followed by a longer passage in ırak, again cadencing on *A*. H3 is dominated by modulations into the hicaz family.[273] H3d then shifts abruptly to saba, while H3e returns to ırak.

In the following display of relative duration it is, accordingly, only 34 H1 that is included. Both here and in 129 M only the seconda volta version has been counted. *G♯* is subsumed under *G*, *c♯* under *c*, and *B♭* under *B𝄳*:[274]



Compared with the first display for ırak, the general profile is remarkably similar up to *c*. But quite apart from the occasional introduction of *d♭*, the relative weakness of the *d* area provides a significant contrast, so that whether or not the decision to assign this material to muhalif ırak is deemed justifiable there is certainly a discernible difference between the two blocks. Attention has been drawn elsewhere to changing practices in nomenclature, and it is perhaps less important to dwell on the appropriateness or otherwise of the labelling proposed here than to recognise that a major mode such as ırak may reasonably be viewed as a complex entity, and whether the moves between the various parts are regarded as mere differences of emphasis and thus essentially internal or as standard transitions to other, closely related modes is ultimately a question of preference, and one to which the Ottoman tradition has given different answers at different times.

44. eviç

The following pieces are in this mode:

9, 131-3, 145, 146, 272, 273, 328

and it is also exemplified in 296.

The question of the nature and perception of the degree of difference between evidently closely-related modes (that is, the extent of intermodality and the wider or narrower patterns of nomenclature responding to it) raised above in connexion with ırak and its satellites, is also relevant to the relationship between eviç and 40. ırak, as is apparent from Cantemir's analysis. Although the extreme contrast between the registers in which they begin, ırak exploring the zone around *F♯*, eviç that around *f♯*, rules out any possible confusion between the two, they thereafter converge; in fact, the expository material in eviç is akin to that encountered in H2 of certain ırak pieces, so that one might wish to put forward as an initial hypothesis that eviç is an expanded acephalic form of ırak in which the rising and falling pitch arch of the constituent areas of emphasis in ırak, statable as x y z y x, is reduced to z y x, if with some enlargement of z and also, importantly, a redistribution of these elements between sections.

Recognition of the characteristic high-register onset of eviç is implicit in Cantemir's classification, according to which it belongs to the group of three high-register (*perdehā-yi tiz*) main-note modes, the other two being 50. gerdaniye and 51. muhayyer. The ensuing

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[273] Initially 30. hicaz itself but then alternating with passages in the lower register suggestive of 32. zengüle, while the opening of H3b hints at 31. uzzal.

[274] The breakdown for the individual pieces is as follows:

	D	*E*	*F♯*	*G*	*A*	*B𝄳*	*c*	*d♭*	*d*	*e*
30	1	1	2	1	9	6.5	8.5	0	2.5	0.5
31	2	5	14	8	24	15	20	1	5	2
33	0	0	5	3	9	7.5	11.5	0	2	2
34	3	3	15	22	43	19	8	0	1	0
35	5	2	7	11	16	11	10	2	0	0
129	2	4	23	17	29	13	6	1	1	0
144	2	3	9	6.5	11	8	5.5	1	2	0
194	2	5	32	21	34	19	9	1	3	0
229	0	0	9	5	11	8.5	5.5	2	1	0
252	0	0	4	7	10	16	18	5	0	0
299	0	1	9.5	4.5	13	12.5	13.5	1.5	6.5	2
306	0	0	5	5	8	6	6	2	0	0
	17	24	134.5	111	217	142	121.5	16.5	24	6.5

description (p. 33) starts predictably by mentioning the eponymous *f♯* (defined as the octave of ırak, *F♯*), but then proceeds, interestingly, by means of negative statements: to develop the area above and below *f♯*, we are told, is [necessary but of itself] insufficient to define eviç: there must ensue a descent on main notes to the lower octave *F♯*, which is the finalis, the reason being that if this is not done, and the final cadence is on *f♯*, the resulting form is nothing but ırak at the octave.[275] The following expansion is also unusual in that, rather than add information on, at least, the maximal range available, it concentrates on just one point, the possible substitution of *f* (= *e♯*) for *e*. Parallel to the possible substitution of *A♯* for *A* in 45. segâh, this was evidently a recent development, one, indeed, sufficiently novel to have left as yet no trace on the notated corpus, although it is by no means inconceivable that, just as with the permissible pitch-set alteration resulting from the replacement of the old form of 24. pençgâh by the new, it was simply sanctioned by performance practice in Cantemir's day, in which case his notations of the eviç repertoire would represent not current fashion but the form in which the pieces had been transmitted by the previous generation of authorities. In any event, this change was one of some significance to Cantemir, for he adds that it can also affect all the modulatory partners (*terkībāt*) of eviç and, consequently, gives a particular melodic character to an eviç *faṣıl* that, in his opinion, distinguishes it from ırak.[276] This might suggest that his account would conclude with the listing of an extensive modulatory family, but in the event only one terkib is mentioned, 3. rahat ül-ervah, characterized in part, again, by the substitution of *f* (=*e♯*) for *e*. Although much the most likely explanation for this development, consonant with the parallel shift occurring in segâh, is simply one of attraction, the sharpening of *e* lending greater tension and intensity to its role as leading note, it is theoretically possible that the process occurred first in rahat ül-ervah, where the leading-note effect of *c‡* in relation to *d* could have been instrumental in encouraging the emergence of an analogous interval below *f♯*. However, it is difficult to conceive that a development in a peripheral mode could have stimulated change in a core one, so that preference must be given to the presumption of export in the other direction, from eviç to rahat ül-ervah.

With a considerably smaller corpus than ırak, the exposition in all the eviç pieces can comfortably be included within the usual display format. Characteristic of the initial development of the core *d* - *a* pentachord is a wave form: the melody oscillates around (or, in one case, below) *f♯*, so that it frequently occurs that a note (here written twice, on different systems, with a linking tie) functions both as the end of one oscillation and the beginning of the next. Although the initial moves *d* → *f♯* and *f♯* → *ȧ* are attested, it is *f♯* → *d* that is encountered in the majority of cases, which suggests a possible kinship with the ırak material displayed in ex. 62, especially in those pieces (9, 132, 146 and 273) also exhibiting *c‡*. Here, however, the context never transgresses the norms of a *d c‡ d* flexure, so that rather than any hint of rahat ül-ervah (or 1. hüzzam) we are evidently dealing with no more than a standard way of articulating the transition from descent to ascent at the trough of the wave. But if the exposition of eviç is not to be equated with ex. 62, it does correspond closely to high-register material found in H2 in some other ırak pieces, notably 134, 251, 253, 254 and 353[277] and, omitting only any initial rising scale used to effect the required register shift to *f♯* from a preceding cadence on *F♯*, H2 from these pieces may be appended in ex. 65 for comparative purposes. The span covered in eviç is, as usual, down to the first cadence (on *F♯*), which in 132, 133, 145, 146 and 328 occurs not in H1 but at the end of Ma.[278]

It is the evident similarity between these two blocks that provides the primary justification for the suggestion that eviç might appropriately be described as an acephalic form of ırak. But in view of the fact that the appended ırak material occurs only in a minority of pieces, being just one among a number of H2 options, such a conclusion appears unsatisfactory, and a more convincing account of the relationship between the two may be arrived at simply by reversing the perspective: it is the H2 ırak material in ex. 65 that should, rather, be regarded as a modulation into eviç. Accordingly, the obviously close kinship between the two modes is preferably to be construed less as one of domination (or simple derivation) than as one of potential modulatory overlap, excursion into eviç, like that into muhalif ırak, being a normal part of compositional strategy in ırak. At the same time it is clear that it is an optional recourse, whereas the overlap with ırak that follows the exposition of the *d* - *a* pentachord in eviç, that is, in the descent to *A* and the following cadential area, is intrinsic. However, reference to exs. 60 and 61, which display the mid-range development of ırak and hence include a *d* → *A* descent, reveals a potential complexity in this area (made up of multiple repetitions and further subsequent elaboration of the lower register before the cadence is reached) unmatched in the exposition of eviç as shown in ex. 65, where we find more often than not a single manifestation of the *d* → *A* descent (with possible elaboration of the area around *d*) followed by an immediate transition to the final cadential descent. But the two are not, properly speaking, comparable, for the material in eviç equivalent to that in exs. 60 and 61 occurs after the initial exposition, and exhibits a similar degree of complexity,[279] with the result that it could, parallel to the ırak material appended to ex. 65, be added to (in this case) ex. 60 without being evidently alien or intrusive: indeed, 131 Me and, to a lesser extent, 132 Mb, share material with 130 Ma in ırak. Although not obligatory (146 and 328 for the most part prefer to remain within the higher register), this mid-range development is certainly a standard feature in eviç and it is reasonable to conclude that here the two modes are, simply,

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[275] The whole account is as follows:

مقام مرقوم تیز پرده دن اغازه ایدوب تمام پرده لر ایله کرك نرمدن تیزه کرك تیزدن نرمه وارسه اوج پرده ایله کندوی بیان ایدوب اجرا
ایتمز ، اول اجلدن لازم کلور که کنه تمام پرده لر ایله اشاغه اینوب نرمده سکزنجی پرده سی اولان عراق پرده سنه واروب قرار ویرمه
لیدر ، وبو دکلر قرار استراحتی ایله کندوی اجرا ایدر ، واکر کندو اوج پرده سنده قرار قلسه اول زمان صرف تیز عراق اولوب اوج
مقامی اجرا اولنزایدی .

It is, however, relevant to observe that whereas all the eviç pieces do, indeed, contain the prescribed descent to *F♯*, the exemplification in 296 does not, consisting only of a development of the area around *f♯*, which is both initial and finalis.

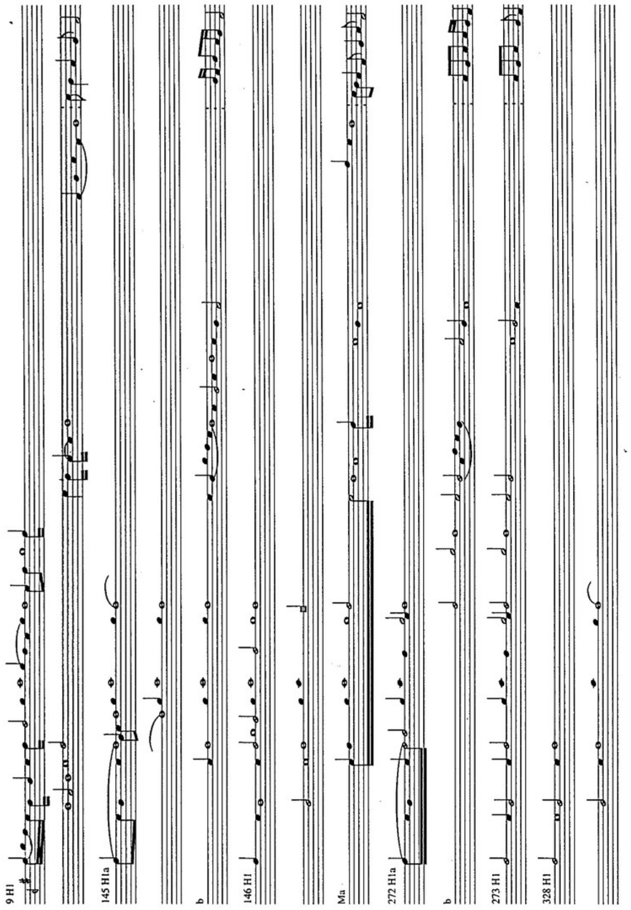
[276] The text continues directly from that in the previous footnote:

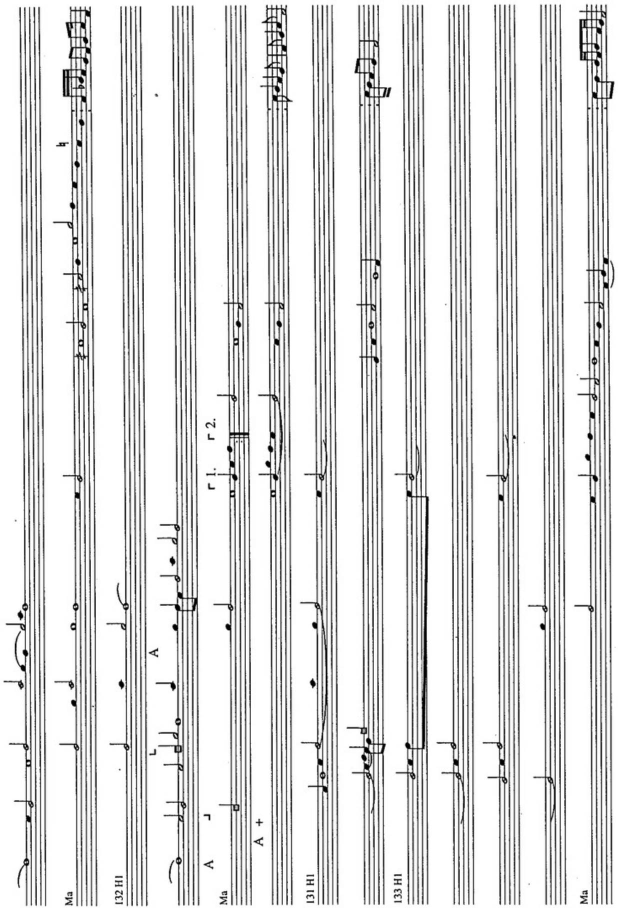
مقام مرقوم حسینی پرده سنی اخراج ایدوب عجم پرده سی ایله حرکت ایلمك رخصتی واردر اویله که جمله ترکباتنی عجم پرده سنك
ایچنده اجرا ایلمك قادر اوله بلور بو سببدن بنم قیاسمده اوج مقامینك فصل نغمهء مخصوصیّه سی عراق مقامندن تفریق اولنور .

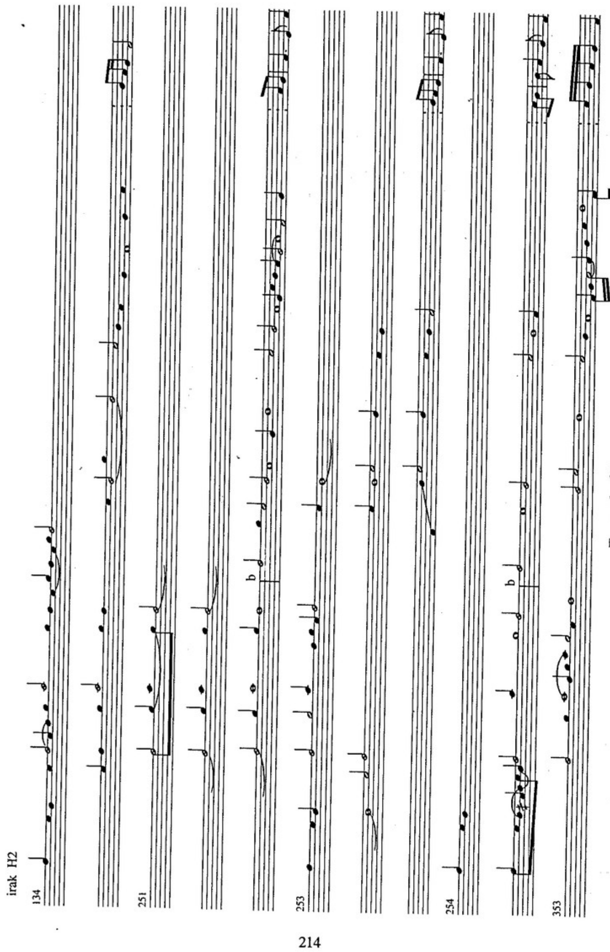
[277] Despite superficial similarities, that in 35, 134, 251 and 306 may be discarded as relating more to the *e* - *a* tetrachord, whereas the area developed in those listed is the *d* - *a* pentachord.

[278] In 328 the descent in Ma includes *c‡*, presumably indicative of a brief modulation into the closely related rahat ül-ervah.

[279] As manifested in M in 9, 145, 272 and 273 and in 131 Md and e, 132 Mb and 133 Mb.


9 H1
145 H1a
b
146 H1
Ma
272 H1a
b
273 H1
328 H1


Ma
132 H1
A
L
Ma
A +
r 1.
r 2.
131 H1
133 H1
Ma



Example 65

occupiers of common territory.

The general question of the compositional strategies which might be employed in H2 of a mode which begins in the upper register has already been raised in relation to 23. mahur, and as these will not necessarily have a bearing on individual modal structures we need do no more than provide a brief review, paying particular attention to the means by which contrast is effected. In a number of cases H2 reverts to the register of H1,[280] and for the most part difference is provided here by the inclusion of extensive scalar passages, sometimes sequentially elaborated, and by shifting emphasis so that *a* becomes more prominent with, optionally, concomitant use of pitches above.[281] But not always: in 146, where it might be thought that the need for variety would be felt with particular acuteness given that M is also a predominantly high-register section, the range is extended by just one step, and otherwise no variety at all is introduced.[282] 328, on the other hand, after a similar high-register M, extends the range right up to *e'*.[283]

273 H2a again appears to offers nothing new, leaving it to H2b to provide contrast. But of greater interest is to note that both subsections have evident reflexes in other pieces, and as ex. 66 shows the whole group constitutes a set of variations on two formulae.[284]

145 H2b repeats the beginning of H2a, but then continues with an extended descent to *F♯* which recurs in H3b, and further development of the lower register (coincident, therefore, with ırak) is provided in H3 in 9 and 131. But this by no means a standard pattern, for in other pieces H3 may remain within, or revert to, the upper register.[285] Modulations in H3 are relatively few: 133 H3a and b seem to waver between (the in any case closely-related) ru-ye ırak and segâh, while the ubiquitous hicaz family makes no more than a solitary appearance in 328.[286]

The display of relative duration covers the material up to the first cadence on *F♯* and,

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[280] 9, 133, 145, 146, 272, 273 (H2a) and 328 (H2a).

[281] 9 opens with descending and ascending scales (*f♯* → *F♯* → *e*), although it then proceeds much as H1 (including, indeed, a repeat of H1 29-42). 133 follows a sequence ascending to *f♯* by further sequences rising to *a*, which here makes its first appearance. (One may note, incidentally, that 133 H2b 1:1-7 and 2:1-7 are identical not only with each other but also with 134 H2a 2:1-7 and H2b 1:1-7 (in ırak).) In 145 *a* is absent from the first half of H1, but in H2 it is initial, and remains prominent; and in 272 we have a brief lower register beginning and then an ascending scale after which, within the confines of the *e* - *a* tetrachord, *a* receives greater prominence than in H1.

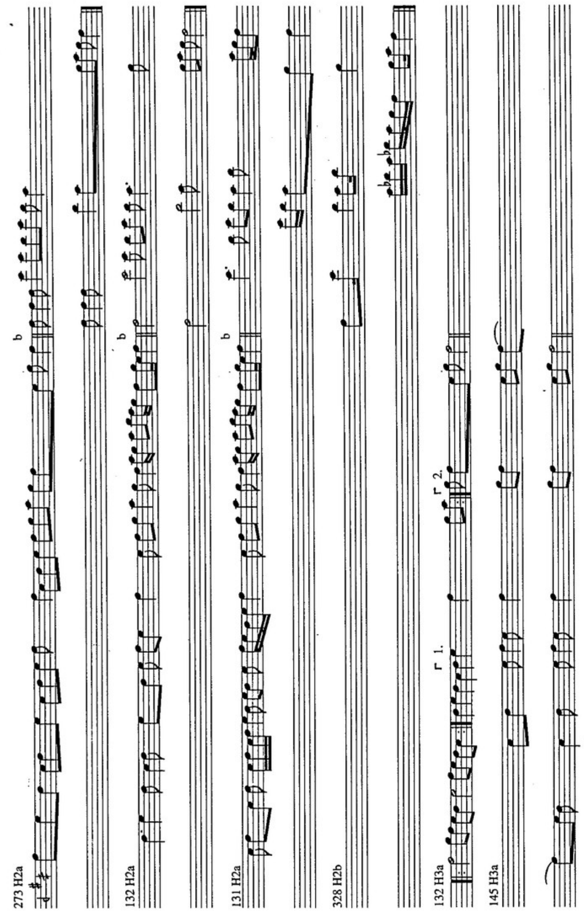
[282] It adheres rigidly to the scalar patterns already used in Ma and b: and until the concluding repetition of H1 33-48 it is in fact exclusively scalar (*F♯* → *b♭* → *c♯* → *b♭* → *d*).

[283] H2a begins by repeating H1 1 1-7 and continues by transposing H1 1 8-2 9 up a third.

[284] Although the expression of the second formula in 132 appears somewhat closer to that in 273 than to that in 131, in the preceding subsection 131 and 132 are virtually identical, so that we are evidently dealing in these two pieces with variant forms of the same H2: in all probability that in 132 (which is attested by ʻAlī Ufḳi) was either plagiarized for 131 (which is not), or borrowed to replace an original that had been forgotten or was considered less satisfactory.

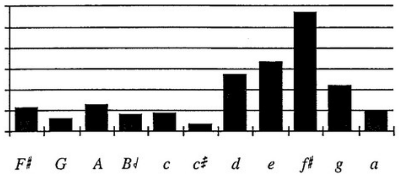
[285] 146, 272, both of which emphasize the *f♯* - *a* segment, and 273.

[286] H3a is in 30. hicaz, after which H3b begins as if about to shift to 31. uzzal. But it remains stuck, using only the notes *e f♯* and *g* (with *c♯* appearing once as a leading note): its modal identity is uncertain. Elsewhere one may note the presence in 131 Mb of hüzzam (with an unexpected substitution of finalis *c*) and in 131 Mc of saba.



Example 66

therefore, corresponds exactly with the contents of ex. 65. *b♭* (one time unit in 328) and *b𝄳* (one time unit in 145) are omitted. *B♭* is subsumed under *B𝄳*, but *c𝄰* and *c* are entered separately, so that we have in all:[287]



With this may be compared the display for M (or the remainder thereof), with the exception of the terkib repetition in 328, and 131 M, which is characterized by modulation. *E* (one time unit in 9, one in 132 and one in 272) and *b♭* (three time units in 328) are omitted. *B♭* is subsumed under *B𝄳*, *f* under *f♯*, and *c𝄰* (which now occupies only two time units in 328) under *c*, so that we have in all:[288]

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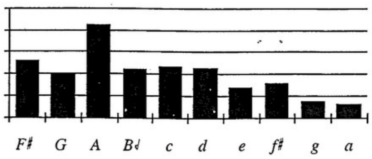
[287] The breakdown for the individual pieces is as follows:

	F♯	*G*	*A*	*B𝄳*	*c*	*c𝄰*	*d*	*e*	*f♯*	*g*	*a*
9	6	4	3	4.5	7.5	1	13	14	21	12	2
131	5	3	4	2.5	2.5	0	6	8	13.5	3	0.5
132	5	3	11	4	4	5	25	27	51	18	7
133	6	1.5	2.5	4	3	0	10	13	12.5	3.5	0
145	4	0.5	5	4	2.5	0	8	12	15.5	6	5.5
146	5	2	5	2	5	1	12	14	31	12	7
272	2	1.5	4.5	2	3.5	0	5.5	10	17	6	2
273	2	2	3	2	2	2	5	7	14	7	2
328	6	4	8	5	2	4	14	15	31	12.5	9.5
	41	21.5	46	30	32	13	98.5	120	206.5	80	35.5

[288] The breakdown for the individual pieces is as follows:

	F♯	*G*	*A*	*B𝄳*	*c*	*d*	*e*	*f♯*	*g*	*a*
9	14	10	21	11	15	14	2	0	0	0
132	14	15.5	27.5	12.5	7.5	8	6	2	2	0
133	15.5	7.5	15	11.5	7.5	7	3.5	2	0.5	0
145	8	7	21	8	7	9	3	1	0	0
146	9	6	9	6	6	11	15	21	9	4
272	8	8	11	9	9	2	0	0	0	0
273	5	5	14	6	7	8	2.5	0.5	0	0
328	6	4	13	4.5	12.5	11	10	21	12	15
	79.5	63	131.5	68.5	71.5	70	42	47.5	23.5	19



The shift of emphasis here is too obvious to require comment. When compared with the displays for ırak it will be seen that the first one bears a general similarity to the second (relating to H2) for ırak, but with an even more pronounced peak on *f♯* (28.5% as against 21.2%) and that the second is likewise broadly similar to the first for ırak, with a peak on *A* but otherwise with generally level (if lower) values over the *F♯* - *d* range and a (less steep) drop above.

2.2.9 *The segâh group*

Related to ırak through the compound ru-yi ırak is the main-note mode segâh, which may therefore be taken out of order. Related to segâh in turn is maye (and, among the modes already discussed, 11. bestenigar, which shares with it both pitch set and finalis, *B𝄳*).

45. segâh

The following pieces are in this mode:

5, 6, 111, 174-183, 216, 247-9, 274, 275, 293, 317, 318

and it is also exemplified in 296.

Cantemir's account (p. 29) begins by stressing the pivotal importance (*ḳuṭb-ı daire* 'pole (=centre) of the circle' is the metaphor he uses) of the eponymous *B𝄳* to the identificatory kernel of segâh, which is manifested by three notes, either ascending or descending from *B𝄳*, and has finalis *B𝄳*[289] The following expansion indicates that there are no restrictions on range, stating curtly that from *B𝄳* one may ascend as far as *e'* or descend as far as *D*; to this Cantemir adds, in a formulation recalling the distinction between 27. buselik and 28. buselik aşirani, that two notes may function as the finalis: *B𝄳*, which produces segâh pure and simple (*ṣâfî ve mücerred*), and *A*, in which case we have the related terkib 46. maye, a member of the modulatory family of segâh to which also belong 11. bestenigar and 15. geveşt.

The validity of Cantemir's definition of the kernel of segâh is fully borne out by the notated repertoire, for the exposition is invariably concentrated upon the *G* - *d* pentachord, with the central *B𝄳* evidently prominent, and in the great majority of cases it is also initial (the

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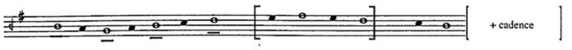
[289] The definition (*teşrîḥ*) is as follows:

كندو پرده سنى قطب دايره ايدوب كرك نرمدن تيزه كرك تيزدن نرمه وارسه اوچ پرده ايله كندوى كندو پرده سنه بيان ايدوب قراره
كوتروب اولر وصاحب قراركاه اولدوغنه بيان واجرا اولنور . ؟؟

other possibilities attested being, not surprisingly, *G* and *d*). However, it is certainly surprising to find that in both 182 and 293 M ends with a standard mahur-type cadence formula on *G* (to which a finalis *B𝄳* is appended in 293 almost as an afterthought).[290] Both in the former and in 274 there are in fact sufficient indications of internal modulation to warrant deferral, so that 20 pieces remain to be considered at this stage.

As with 44. eviç, characteristic of the exposition is a wave form, the melody generally oscillating around *B𝄳* (or, secondarily, around *d*), although oscillation may take place not just around but alternatively below or above.[291] For economy of presentation in ex. 67 two immediately succeeding oscillations in the same area will be juxtaposed horizontally, rather than vertically one beneath the other, although it will still happen, as before, that as a result of the recursive structure of the wave form a note functioning both as the end of one oscillation and the beginning of the next will be written twice, on different systems, with a linking tie. The most frequent underlying pattern may be represented as:



in which the various points of entry are underlined and the optional area is bracketed. Because the structure is recursive there are also various points of re-entry, but although choosing the most appropriate may involve a degree of arbitrariness it is clear that the two most important are the first and second *B𝄳*s. In two cases, 275 and 293, the first full cadence is deferred until M, and here coverage is truncated, in 275 taking in only part of H1.[292] Initial *B𝄳* and the change of direction at *G* are often accompanied by flexures (*B𝄳 c B𝄳* and, invariably, *G F♯ G*),[293] and these have not been elided.

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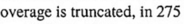
[290] In effect, 293 seems to represent a modal complex in which segâh is predominant until Ma, only to be replaced in Mb and, more obviously, Mc by rast.

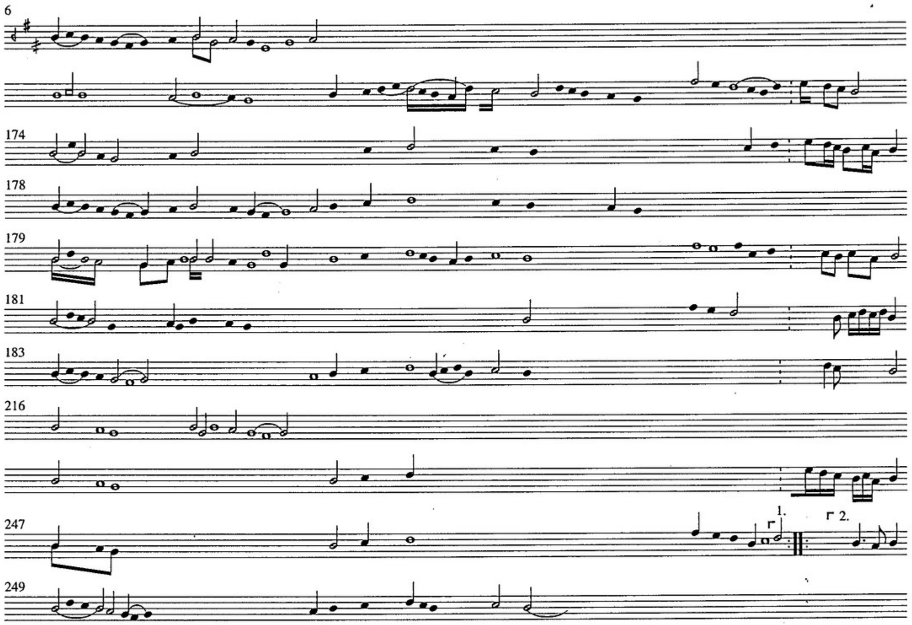
[291] And even, in the extreme case of 111, which omits *G*, only above.

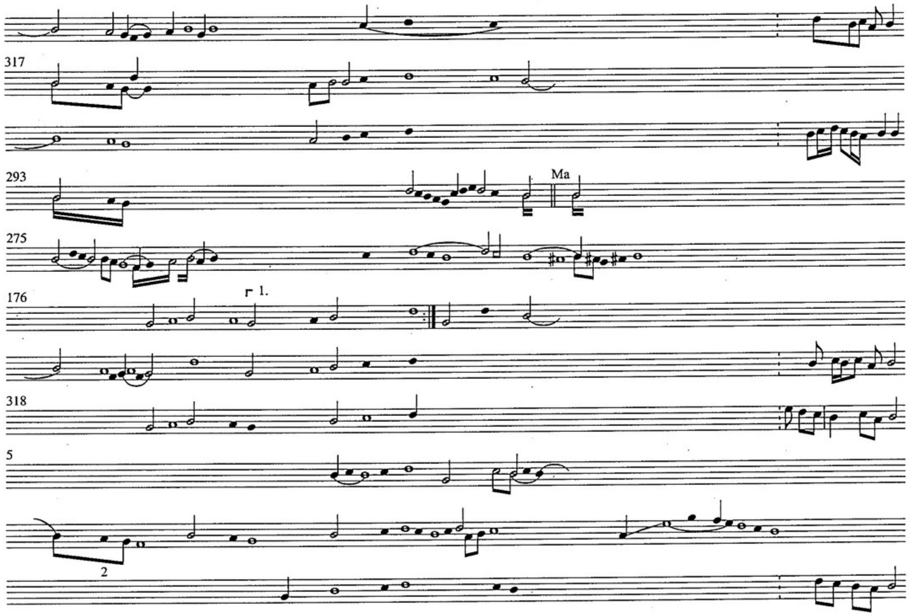
[292] As the beginning of the transition to rast in 293 is to be located already in Ma there is little point in including any part of M here, especially as Ma 1-2:6 is a repeat of the opening of H1 (while the end of H1 is to be accounted less a cadence on *G* than a descending formula linking it with Ma by providing another instance of the *B𝄳* - *G* - *B𝄳* oscillation).

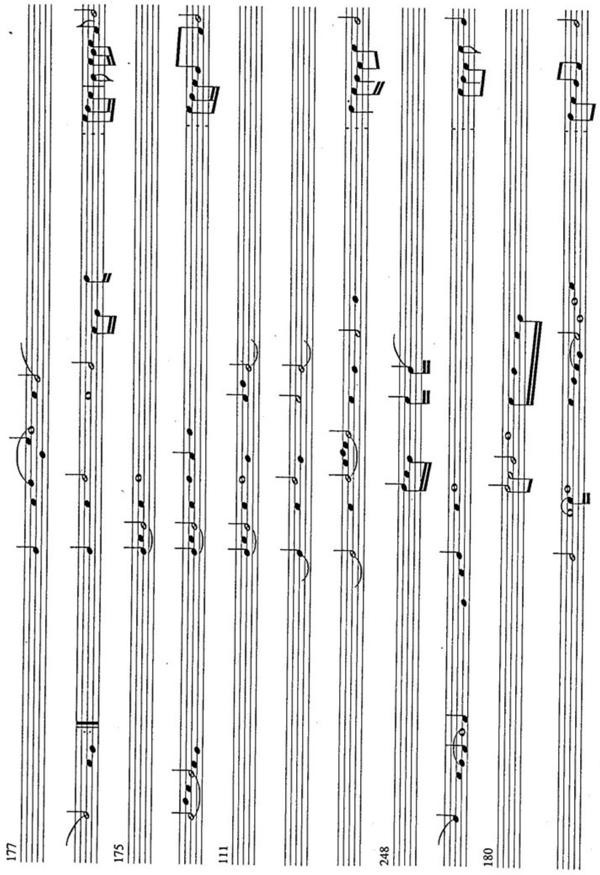
[293] *F♯* is the lowest pitch encountered in this set of 20 pieces, with the sole exception of the *E* in 6. Here the *G F♯ G* flexure duly appears, but where a repeat would be expected we encounter *E*, which, as the notes to Part i point out, is exceptional and inexplicable (but also seemingly deliberate). *E* appears twice in all, and on both occasions is followed by *G*, so that it might be just possible to regard it as the onset of a gapped ascending formula:



But this is clutching at straws, for the formula in question would not only have penultimate *A* rather than *c*, but would also have a different characteristic rhythmic cast, its normal format being ♪ ♩ ♪ ♪.♪ ♩ . On balance, *E* is a *lectio difficilior* that has nothing to commend it, and it therefore seems best to dismiss it as an uncharacteristic blunder, an inadvertent use of the wrong symbol possibly copied unthinkingly from an early draft made before Cantemir had grown thoroughly familiar with his own system.


6
174
178
179
181
183
216
247
1.
2.
249

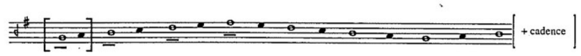

317
293
Ma
275
176
1.
318
5
2



Example 67

The H1 material exhibits, in general, a high level of consistency, although it was evidently possible to favour either the *G* - *B𝄳* segment (as in e.g. 176 and 275) or the *B𝄳* - *d* segment (as in 111 and 175) at the expense of the other. Related to this is the degree of variation encountered in the approach to the cadence, where both ascent and descent occur. Although no particular rhythmic formula is favoured for the cadence itself, its pitch organization centres upon the descent *d c B𝄳*, often expanded to *d c B𝄳 A B𝄳* or *d c B𝄳 c A B𝄳*, but despite the common insertion of a penultimate *A* there is no notated example of the sharpening to *A♯* which is exhibited in the medial cadence of 275.

An especially clear contrast with the uniform location of emphasis within the *G* - *d* pentachord in H1 is provided by 275 M, where the *G* - *B𝄳* segment is virtually abandoned in favour of the *d* - *f♯* segment. But even if not carried to such extremes elsewhere, it is certainly the case that, by comparison with H1, M is characterized in most pieces by an upwards shift of emphasis.[294] In 177 M begins by supplying material in the *G* - *B𝄳* segment, presumably to compensate for its relative neglect in H1, but then jumps to *d*, and it is the greater degree of elaboration of the area around *d*, and its introduction at an earlier stage, that most frequently distinguishes M, so that just as we find in 40. ırak a shift of emphasis from the initial *F♯* - *A* segment to *A* - *d*, here emphasis may be said to move from the *G* - *d* pentachord to the *B𝄳* - *f♯* pentachord with, again, the central note prominent.[295] A comparable abstract of the pattern of oscillation in M is less readily definable, given its generally greater length and freedom of organization, but a typical assemblage of common features might be formulated as:



so that, in relation to the previous pattern for H1, it may be said that the first *B𝄳* - *G* - *B𝄳* oscillation has been moved back to the end: the same cycle is run through, but with the onset delayed. Again, there will be various points of re-entry as well as of entry.

Display of the material in M (in ex. 68) need not draw upon quite as many pieces as are represented in ex. 67, for a number may be disregarded in addition to 111, in which there is no M.[296]

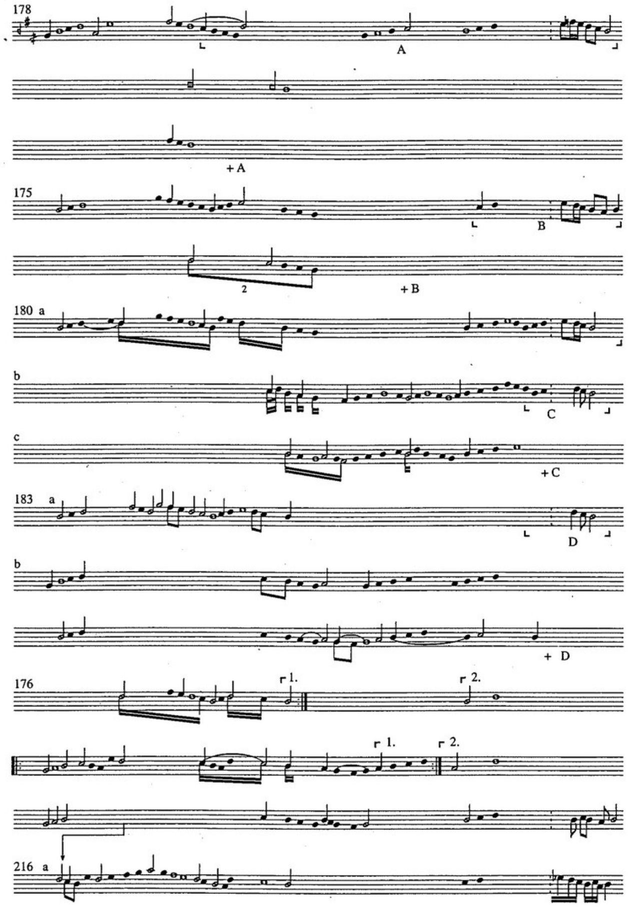
It will be seen from ex. 68 that where M is divided into two or more subsections the second or later ones tend to return back from the initial emphasis on the elaboration of the area around *d* to develop the lower *G* - *B𝄳* segment before the final cadence.

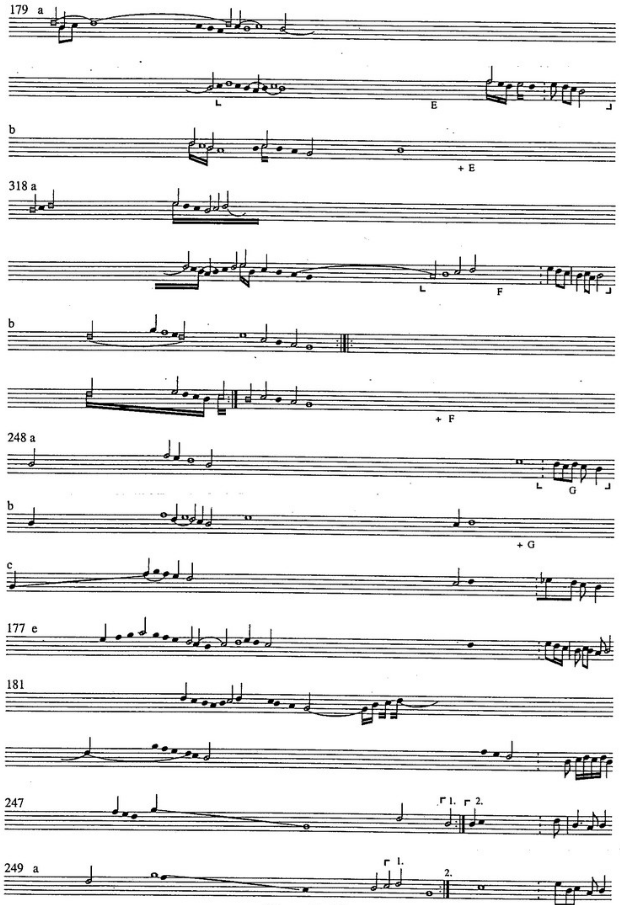
---

[294] The obvious exceptions are 5 and 174: the latter may hint at a modulation, but both remain within the same range as H1 and develop it in much the same way.

[295] In the one segâh piece in which there is no M, 111, it is interesting to observe that these characteristics are already present in H1, which, as noted, concentrates on the *B𝄳* - *d* segment.

[296] 5 and 174, in which M is barely to be differentiated from H1; and, along with 293, 6, in which the material before the repeat of the cadence area (time units 73-88) may be identified as a modulation into rast (concluding in time units 65-71 with a standard cadence formula on *G*). A further modulation, into 15. geveşt, occurs in 216 Mb, and another, possibly into maye, in 178 Mb, which cadences on *A*: both these subsections will be disregarded, as will 177 Ma-d, 249 Mb and 317, all of which remain within the *G* - *e* range and add nothing to the melodic repertoire already displayed for H1.


178
A
+A
175
B
2
+B
180 a
b
C
c
+C
183 a
D
b
+D
176
1.
2.
1.
2.
216 a


179 a
E
b
+E
318 a
F
b
+F
248 a
G
b
+G
c
177 e
181
247
1.
2.
249 a
1.
2.

Example 68

Given the common concatenation of prominent notes a third apart, it might be anticipated that in a number of pieces H2 would be characterized by a further upwards shift of emphasis not to *d f♯* and *b𝄳* but to the *d* - *a* pentacord with prominent *f♯*, thus producing, before terminating at a cadence on *B𝄳*, what might best be viewed as modal overlap or congruence with eviç (rather than a simple modulation into it). In four pieces H2 begins with a formulaic ascending scale passage from *G* which might be expected to arrive at *f♯*, but does so in only one case.[297] However, three others open with a jump from *B𝄳* to *f♯*,[298] while *f♯* is initial in a further nine,[299] and within this set of 13 pieces no fewer than nine broadly fulfil the expectation of emphasis being accorded the *d* - *a* pentachord.[300] Although this material is fairly homogeneous, no particular insight would be afforded by providing an analytical display, for the bulk of it could be incorporated without difficulty—setting aside the inevitable differences in the cadence area—into ex. 65: in other words, it exhibits a high degree of similarity with the initial exposition area of eviç down to *d*, so that we encounter here, again, a zone of modal overlap, a pool of common melodic resource the identity of which is defined, essentially, by formal criteria, that is, the point within a composition at which it is appropriate to explore it. Another potential overlap, and possibly a more precise one, since it now extends to the cadence area too, is with a member of the modulatory family of segâh, 11. bestenigar. In the event, the melodic profile of H2 in this set of segâh pieces seems to provide a better alignment with ex. 65 (eviç) than with ex. 22 (bestenigar), but the sample on which the latter is based is so small, consisting largely of one piece by Cantemir himself, who is not always routinely orthodox in his compositions, that it would be wiser to leave the question open, and certainly not to exclude the possibility that the segâh material might be definable as congruent with, or even a modulation into, bestenigar.

Similarities with these pieces may also be detected elsewhere.[301] But there is a sizeable group which provides a different pattern of prominence in which *b𝄳* now comes to the fore[302] —one therefore no longer favouring a chain of thirds but suggesting, rather, repetition at the octave.[303] In three cases there is also a cadence on *b𝄳*,[304] although in general the degree of melodic resemblance in this group can hardly be compared with that in the previous one. Two pieces may be thought of as in some way combining features of both: 275, which could readily have been classed with the first group were it not for the eventual rise to *b𝄳* (and *c'*), and 6, which clearly belongs to the first group down to the cadence on *B𝄳* at time unit 55, but then introduces an octave jump and a brief phrase emphasizing *b𝄳*.[305] Further, although reference to a possible equivalence with bestenigar was made in relation to the first group, that should not be taken to mean that it is necessarily excluded in relation to the second, and despite the absence of *b𝄳* from Cantemir's composition in bestenigar and from his description of this mode, the awkward fact remains that one of the group in which it is given some prominence, 177, has the title bestenigar, and even if this could be understood literally, such coincidence is only to be accepted as a last resort, preference being given to the possibility that it could be a secondary modal designation. 177 H2 consists of a large-scale sequence, with a melodic arch from *f♯* (with an initial *f♯ e♯ f♯* flexure) rising to *b𝄳* and returning to cadence on *f♯* which is transposed first to *d* (with an initial *d c𝄲 d* flexure) and then to *B𝄳*, and if it is assumed that an ascent to *b𝄳* could occur in the exposition of bestenigar there seems no compelling reason for rejecting a possible connexion here. To the question of why, if this tentative identification is accepted, 177 in particular should be singled out by having the link with bestenigar recognized in its title, the most likely answer is because of its unusual extent, for the same modal identity is also sustained, exceptionally, throughout H3.

Similar sequential passages may be found in H3, where they are merely typical, and say nothing of significance about segâh. In most cases H3 provides contrast, as expected, either in the form of a slightly freer development, but with a general preference for the lower register after the high-register excursions of H2, or in the form of modulatory passages. Among the latter may be detected the other two members of the modulatory family of segâh, geveşt in 216 H3b and 47. ru-yi ırak in 293 (but in H4, this being one of the very few pieces in which H3 is not the final section).[306]

It is because of the high incidence of modulation they contain that consideration of 182 and 274 was deferred. Throughout H1 and the first part of M, 182 regularly descends to *F♯* (which occurs in no other segâh piece apart, precisely, from 274), while in the latter part of M it is replaced by *F𝄲*, and the final cadence is on *G*. The suggestion, if anything, is of a modal hybrid with the beginning in 47. ru-yi ırak and the ending predominantly in 48. rast, and the piece will be discussed further under ru-yi ırak. 274 likewise begins with a descent to *F♯*, suggestive of ru-yi ırak, but (sub)section-final cadences are all on *d* or *B𝄳*, so that in this case discussion within the context of segâh seems more appropriate. As is clear from the notes in Part i, the correct assignment of material to sections in this piece is somewhat problematic, but it is at least evident that the introduction of the upper register, especially in

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[297] 179. The other three are 5, 175 and 178.

[298] 111, 181 and 216.

[299] 6, 176, 177, 180, 183, 249, 275, 293 and 318.

[300] 6, 111, 176, 179, 180, 181, 183, 249, 293. And to them may be added 175 H2b, 174, in which *d* is initial, and, further, 174 H3b, 183 and 293 Z.

[301] In H2 of 317 and 318, but while there is some emphasis on the *d* - *f♯* segment, *a* is virtually absent. 5, on the other hand, includes *a* (and also *b𝄳*) but attaches no importance to *f♯*.

[302] 175 H2a, 177, 178, 216, 247, 248, 275, to which may also be added 293 H3.

[303] This is particularly the case in 216 H2a, where the initial repeated *B𝄳* - *f♯* leaps in 1 are echoed by *f♯* - *b𝄳* leaps in 3, while in 178 H2a we encounter motivic repetition at the octave with, after an initial *G* - *g* scale, an almost exact reduplication of H1 1 entailing substitution of *f𝄲* for *f♯* (which reappears at the cadence). 175 H2a exhibits a similar physiognomy, a rising scale being followed by repeated descents from *b𝄳* to *f♯* (if with *a♯* in place of *a*).

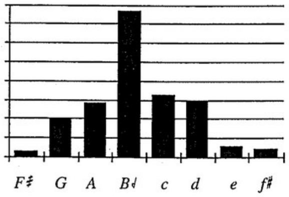
[304] 216 H2a, 247 and 248 H2a.

[305] This either represents a different line of transmission or is a relatively recent innovation replacing the earlier continuation of the descending line (down to *D*) recorded in the 'Alī Ufḳī version.

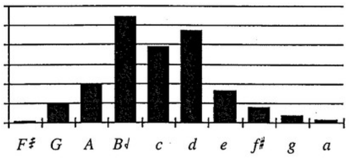
[306] The number of readily detectible modulations is otherwise not great. The hicaz family is represented by 30. hicaz, which appears in 111 (and, briefly, in 5 Z), and 34. nigriz, which appears in 216 (H3a) and 249; 43. muhalif ırak appears in 179 and (the *f* - *d* segment of) 35. acem in 175 H3a; and 25. saba appears in 181 and 176 (where it forms the second member of sequence the first of which, with *e♭*, suggests 26. beyati). A further possible instance of saba is in 6 (but if so in an unusual variant form, evidently altered under the influence of segâh, from which *A* is omitted), although it is just possible that an earlier seemingly intrusive and otherwise unmotivated *c𝄲* (producing a chromatic descent: *e d c𝄲 c B𝄳 A*...) might have been intended to suggest, rather, 16. ısfahan.

view of the low-register focus of the area centred on *F♯* in the first two cycles, is made at a rather early stage: the most natural location for the central material in what has been labelled Ma and b would be H2. But whatever decision is made about which (sub)sections this material might most appropriately be assigned to, there is no reason to think of it as being in any other mode than segâh, even if the introduction of *c‡* towards the end of [Mb] marks a modulation, conceivably a brief allusion to nigriz, conceivably also, if the beginning of [Mc] is a continuation, a shift into rahat ül-ervah. However, the end of [Mc] marks a clear return to segâh, and [Md] is again akin to much H2 segâh material, albeit with an unexpected *d c d* flexure instead of the normal *d c‡ d*, which appears, rather, in [H2]. [H3] is also modulatory: the first subsection gives an initial impression of hicaz, but the *A♯* preceding the cadence on *B𝄳* suggests a modulation back towards segâh, arriving at the intermediate point represented by geveşt; the second, however, reverts to hicaz, and there is no hint of *A♯*, despite the fact that the finalis is again *B𝄳*.

Given the size of the corpus the displays of relative duration have been based, arbitrarily, on every other piece. The first covers the material up to the first cadence on *B𝄳* and, therefore, corresponds exactly with the contents of ex. 67 except for the exclusion of 275 M. In 317 only the prima volta version has been counted. *g* (one time unit in 5) is omitted. *A‡* is subsumed under *A*, so that we have in all:[307]



With this may be compared a second display relating to M. Despite the omission of 111, which has no M, the teslim in 175, and 216 Mb, which modulates, there is no need to co-opt material from elsewhere, as the extent of the remainder still exceeds what is covered in the first. *A‡* is subsumed under *A* and *e♭* under *e*, so that we have in all:[308]



Thus although *B𝄳* remains the 'pole', as Cantemir puts it, there is a clear shift of emphasis away from concentration exclusively on *B𝄳* towards the *B𝄳* - *d* segment as a whole, with *d* almost equally salient.

It may be worthwhile to compare with the above a third display, relating to H2. This is useful for its demonstration of the nature of the second shift of emphasis, up to *f♯*, accompanied by a concomitant further reduction in the importance of the notes below *B𝄳*, which now become marginal. In 317 only the seconda volta of both a and ḃ is counted. *F‡* (one and a half time units in 317) is omitted. *c‡* is subsumed under *c*, *a♯* under *a*, and *e♯* under *e*, so that we have:[309]

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[307] The breakdown for the individual pieces is as follows:

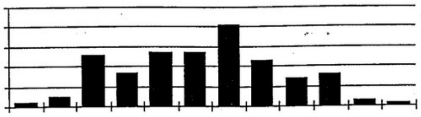
	F‡	*G*	*A*	*B𝄳*	*c*	*d*	*e*	*f♯*
5	3	9	12	29.5	16.5	12	3	2
111	0	0	8.5	24	8.5	15.5	2.5	1
175	0	1	4	11.5	6	4.5	1	0
177	0	5	4	20.5	12	10.5	4	0
179	0	5	9	27	7	9	4	3
181	0	2.5	2	11	3	4.5	0.5	0.5
216	2	14	9	22	6	2	1	0
248	2	4	4	7	5	2	0	0
275	1	6	11	33	18	15	0	4
317	0	7	11.5	20	5	4.5	0	0
	8	53.5	75	205.5	87	79.5	16	10.5

[308] The breakdown for the individual pieces is as follows:

	F‡	*G*	*A*	*B𝄳*	*c*	*d*	*e*	*f♯*	*g*	*a*
5	3	5.5	14	32	21.5	11	1	0	0	0
175	0	2	4.5	14.5	8	20.5	4	1	1.5	0
177	0	18	24	49	33.5	52.5	25	2	2	2
179	0	4	10	38.5	31.5	29	11	4	0	0
181	0	3.5	4	9.5	8	8.5	1	1	0.5	0
216	0	0	2	11	11	20	5	3	2	2
248	0	1	1	20	12	18	11	8	1	0
275	0	2	2	22.5	13.5	18	6.5	13	7.5	3
317	0	5	19	28	22.5	19	2.5	0	0	0
	3	41	80.5	225	161.5	196.5	67	32	14.5	7

[309] The breakdown for the individual pieces is as follows:

	G	*A*	*B𝄳*	*c*	*d*	*e*	*f♯*	*g*	*a*	*b𝄳*	*c'*	*d'*
5	3	4	17	14	18	12	8	7	3	2	0	0
111	0	1	7.5	3.5	7.5	8.5	18.5	5.5	7.5	0.5	0	0
175	0.5	0.5	5	2	5	5.5	17.5	8.5	6	5.5	0	0
177	0	1	15.5	12.5	14	15	15.5	14.5	4	4	0	0
179	2	2	5	3	9	13	16	9	5	0	0	0
181	0	0	8	4	7	10	16.5	9.5	4	1	0	0
216	0	1	12	2	9	2	23	10	10	21	5	3
248	0	0	3	2	4	5	4	5	5	16	3	1
275	0	0	9	6.5	10.5	13.5	21.5	9.5	6.5	9	2	0
317	2.5	8.5	14.5	12	18.5	17.5	14	6.5	0.5	0	0	0
	8	18	96.5	61.5	102.5	102	154.5	85	51.5	59	10	4



At the same time, however, it should be noted that these figures represent a conflation of the different H2 types discussed above, so that although *a* and *b𝄳* end up almost equal, their representation in individual pieces is often decidedly unequal: as the breakdown for the individual pieces shows, the duration of *b𝄳* in 248 is three times that of *a*, whereas in 179 it fails to appear at all.

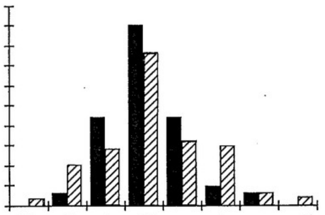
46. maye
There is one piece in this mode, 319, and it is also exemplified in 296.

It may be recalled that within the description of 45. segâh Cantemir refers to maye as a terkib that results from the use of the second possible finalis, *A*, the implication being that in all other respects it is identical to segâh. Its exemplification in 296 certainly contains nothing counter to such a view, even if its unusual brevity makes it impossible for more than one or two essential features to be illustrated. Not surprisingly, maye immediately follows segâh and, as commonly occurs in 296, is disguised by beginning with a repeat of part of the exposition of the previous mode, in this case a descent (time units 1-4) from *d* to *B𝄳*. The abbreviated repeat descent that follows, however, cadences not on *B𝄳* but on *A*, this alteration of the finalis being the one single feature that establishes the new modal identity. A further reference to maye on p. 27 confirms it as a terkib with finalis *A*, but more important is the separate entry accorded to it on p. 52, which gives *G* as initial and then specifies ascent via *A♯* and *B𝄳*. Any further ascent above *B𝄳* is, we are told, articulated like segâh, and there is then a descent on the same notes to the finalis, *A*.[310]

According to this account, therefore, the first, ascending, part of maye is omitted from 296. The omission of a major feature is hardly surprising, almost inevitable, indeed, given that the total span is only a single cycle of 10 time units; but it does at least allow the obvious conclusion that, even if normal, inclusion of the initial *G A♯ B𝄳* ascent was not obligatory, and confirmation is provided by the one full piece in maye, 319, from which this element is also absent. Indeed, the notation of 319 contains no instance of *A♯*, and the piece has *B𝄳* as initial. The resemblance to segâh this suggests is reinforced by the generally segâh-like oscillating shape of the melody and is further underlined by the fact that, contrary to Cantemir's explicit comments and the evidence of 296, both H1 and M cadence not on *A* but on finalis *B𝄳*, so that the problem arises of what other mechanisms of differentiation, if any, there might be. We may approach this first by looking at the exposition statistically, comparing the figures for duration in H1 with those for H1 in 175, the one segâh piece to use exactly the same pitch set:

	G	*A*	*B𝄳*	*c*	*d*	*e*
319	1	7	14.5	7	1.5	1
175	1	4	11.5	6	4.5	1

and comparing the percentages for 319 (on the left) with the first display of relative duration for segâh (on the right):



In both pairs the figures for 319 produce a higher peak for *B𝄳*, and a lower value for *d*, but the general profile is too similar, and the sample for maye too small, for these differences to be taken as evidence of modal differentiation (if anything, the conclusion would have to be that maye was more segâh-like than segâh itself), and it is only with the hindsight provided by the definitions in the *edvār* that we could begin to read anything significant into the slightly greater salience of *A* in maye and note, from the perspective of segâh, the slightly atypical duration given it in the cadential area. For similar comparisons with regard to M (omitting the final (sub)section (*terkīb-i intiḳāl*), which repeats Ma), recourse may be had to 5 and 179, which between them cover more or less the same pitch zone:

	F‡/F♯	*G*	*A*	*B𝄳*	*c*	*d*	*e*	*f♯/f*
319	0.5	3	9.5	22.5	19.5	18	6.5	0.5
5	3	5.5	14	32	21.5	11	1	0
179	0	4	10	38.5	31.5	29	11	4

and in the same way the percentages for 319 (on the left) may be juxtaposed with the second display of relative duration for segâh (with *f♯* and *F‡* in segâh corresponding to *f* and *F♯* respectively in maye):

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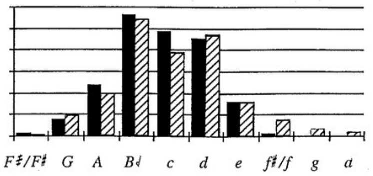
[310] The whole account is as follows:
تشریخ مایه راست پرده سندن حرکت اغازه سنی شروع ایدوب دوکاه پرده سنی آشار ونهاوند پرده سیله سکاهه دوشر سکاه پرده
سندن دخی تیزه چقندیقده سکاه یوزیندن حرکت ایدر وکنه اول یولدن عودت ایدوب دوکاه پرده سنده قرار قلر



As before, comparison of the figures for the three pieces shows no significant contrasts, and the percentages in the following display are this time extremely close, compelling the conclusion that there are no overall variations in duration sufficiently marked to establish a modal identity for 319 separate from segâh.

The nature of the pitch set, however, is a little different. The substitution of *f* for *f♯* is, in context, unimportant (and *f♯* will appear in H2), but the use of *F♯* in place of *F𝄲* is unexpected, and where it occurs in segâh pieces has been associated with a modulation into 47. ru-yi ırak. But of more significance is the context in which it appears, for whereas in segâh *F𝄲* is particularly associated with a flexure at the trough of a *B𝄳* - *G* - *B𝄳* oscillation, here the *G F♯ G* flexure leads rather to *A* and then *d*, the local points of emphasis thus being more reminiscent of ırak than of segâh, and in the light of Cantemir's remarks it is reasonable to find the pegs on which modal identity hangs in the cadential use of *A* (if medial rather than final, as prescribed by him), which appears in H1 1 and Ma **2**, allied to its greater duration as compared with segâh norms when penultimate before finalis *B𝄳*.

Emphasis on *A* is also apparent at the beginning of the single cycle of H2a (which recurs at the end of H2c), where the *d* - *A* tetrachord is outlined before *f♯* is introduced. What follows, extending over most of H2b and c, is a development of the *d* - *a* pentachord, with the *d* - *f♯* segment prominent, akin to that encountered in segâh, but with the interesting difference that although H2b **1** cadences on *B𝄳* it is echoed in **2** by a cadence on *A*. H3a begins with the same descent through the *d* - *A* tetrachord as H2a, and continues with a further descent through the *A* - *E* tetrachord before developing the lowest register and cadencing on *D*, and whether or not this passage was considered to be within maye, it is clear that the initial emphasis on *d*, *A* and *E* contrasts with the equivalent *d*, *B𝄳* and *G* of segâh. Finally, H3b is made up of a variation of material in Ma **1**, beginning with a transposition from *d* to *A*, the importance of which note may be indicated by the fact that it occupies 10.5 of the total of 32 time units.

It has also been suggested that 178 Mb might be assigned to maye. It has finalis *A*, as prescribed by Cantemir, and in general terms its melodic contour is similar to that of 319 Ma. However, exactly the same general contour, a repeated descent within the confines of the *d* - *A* tetrachord cadencing firmly on *A*, can be found, for example, in 6. safayan (22 H2a), so that the justification for preferring to identify 178 Mb as maye is, in part, its location, the fact that it occurs in the middle of an exposition of segâh. But there is also a difference in internal distribution: *B𝄳* should be expected to be more prominent in maye than in other modes not related to segâh, and comparison of the two, which are identical in rhythmic cycle (fahte) and length (40 time units) shows that whereas in safayan *B𝄳* occupies 6 time units, and never occurs in a positionally prominent node within the cycle, in 178 Mb it occupies 13, and is positionally prominent three times.

47. ru-yi ırak

This is succinctly described by Cantemir (p. 54) as beginning like 45. segâh and then descending on main notes to its finalis, *F♯*, which suggests a straightforward segâh → ırak combination. Unfortunately, there is nothing in the corpus of notations to which the name ru-yi ırak is attached: it does not appear in 296, nor is there anything matching this description in the other külliyat pieces, 22 and 23. However, there are two pieces within which its presence can be detected with reasonable confidence: 293, where H4 develops the *B𝄳* - *F♯* tetrachord, with *B𝄳* initial and *F♯* final, and 182, where there is sufficient material corresponding to Cantemir's definition to warrant examining the piece here rather than under segâh which, if the identification is correct, would be a flag of convenience, ru-yi ırak being presumably a terkib too marginal to be considered eligible for the role of main mode in a piece. 293 H4 is constructed according to the oscillating pattern familiar from 44. eviç and segâh, and may be similarly represented. Including all of 182, and omitting *F♯* from the mode signature, so that the contrast between *F♯* and *F𝄲* is always marked in the body of the notation, we may represent the above as in ex. 69.

To ru-yi ırak can be assigned all the left-side material down to *F♯* in 182, either really (H1, Mb, the second line of H3a, teslim) or potentially (the first line of H3a, where reinterpretation is subsequently required). The following brief descent from *B𝄳* or *c* is, likewise, a potential continuation, but once *F𝄲* is reached it is clear that a modal shift has taken place. In H1 this can only be to segâh, which is exactly what one would expect if there were to be further development of ru-yi ırak, the return to the first member of the combination at the same time marking the preceding *F♯* as an identificatory cadence note, but although the ensuing repetition confirms the continuation of ru-yi ırak, the cadential closure on *B𝄳* at the end of the section, denying any further possible descent to the expected finalis *F♯*, means that the second occurrence of this material must be reinterpreted as, indeed, a modulation into segâh. In Mc, on the other hand, the nature of the melodic development after the abrupt jump from *B𝄳* to *F𝄲*, confirmed by the cadence on *G*, indicates a modulation to 48. rast.[311] Ma begins as if in segâh (and hence potentially in ru-yi ırak), but fails to descend to *F♯*: the cadence on *A* suggests, rather, a further modal shift, to 46. maye this time, so that it is only in Mb that ru-yi ırak unequivocally returns. H3 varies some of the above material, while H2 ventures briefly into the upper register, the *g* → *A* descent of H2b possibly interpretable, if we may hazard identification of yet another mode nowhere mentioned within the corpus of notations, as 50. gerdaniye. Placing within round brackets the identity of material that will either form a compound entity or will require subsequent reinterpretation, the complex network of modal interrelationships within this piece may be summarized as:

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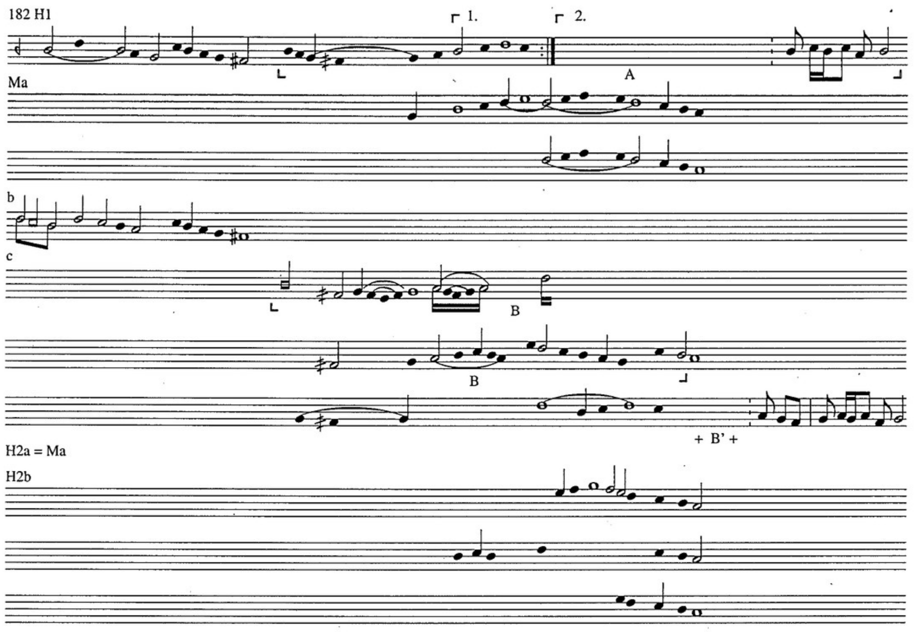
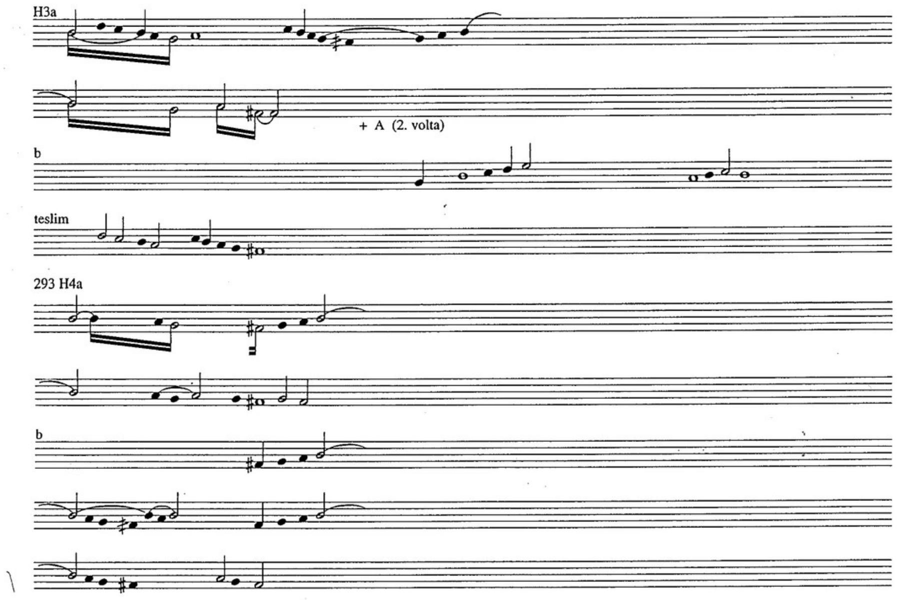
[311] Within which the repeated *B𝄳 A♯ B𝄳* flexure at the onset of the slightly varied repeat suggests a further (micro-)modulation.





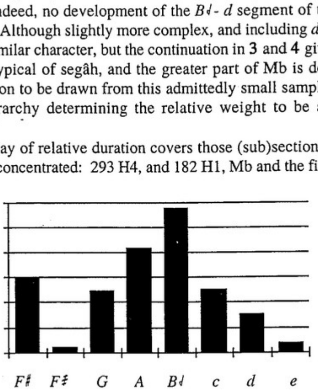
Example 69

H1	(segâh → ırak =) ru-yi ırak → (segâh → ırak =) ru-yi ırak → segâh
Ma	(segâh →) maye
Mb	(segâh → ırak =) ru-yi ırak
Mc	(segâh →) rast [→ segâh →] rast
H2a	(segâh →) maye
H2b	gerdaniye
H3a	segâh → (segâh → ırak =) ru-yi ırak → segâh
H3b	(maye →) segâh
teslim	(segâh → ırak =) ru-yi ırak

from which it is fairly clear that, if ru-yi ırak could not be deemed the main mode, the obvious candidate, despite the final cadence in rast, had to be segâh.

Despite the oscillating shape of 293 H4, the emphasis appears to be on the *B𝄳* → *F♯* descent, and there is, indeed, no development of the *B𝄳* - *d* segment of the segâh element, *c* being the highest note. Although slightly more complex, and including *d*, the opening of 182 H1 has an essentially similar character, but the continuation in **3** and **4** gives greater weight to the *G* - *d* pentachord typical of segâh, and the greater part of Mb is devoted to the *B𝄳* - *d* segment. The conclusion to be drawn from this admittedly small sample thus appears to be that there was no hierarchy determining the relative weight to be attached to the two component parts.

The following display of relative duration covers those (sub)sections where the material defined as ru-yi ırak is concentrated: 293 H4, and 182 H1, Mb and the final teslim:[312]



Thus although, as in segâh, *B𝄳* is salient, it does not dominate to quite the same extent, and whereas the development of the segâh exposition gives prominence to the *B𝄳* - *d* trichord, the general profile here reflects the different modal character of this material, the centre of gravity of which is located rather in the *F♯* - *B𝄳* tetrachord.

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[312] The breakdown for the individual (sub)sections is as follows:

		F♯	*F𝄲*	*G*	*A*	*B𝄳*	*c*	*d*	*e*
293	H4	16	0	11.5	14.5	19.5	0.5	0	0
182	H1	8	2	9	13	21.5	6.5	3.5	0.5
	Mb	2	0	1.5	7	12	15	8.5	2
	teslim	2	0	1.5	5	2	2	2.5	1
		28	2	23.5	39.5	55	24	14.5	3.5

2.2.10 *The rast group*

Having introduced segâh and its related modes immediately after the ırak group, specifically because segâh and ırak combine to produce ru-yi ırak, we may now at one and the same time proceed to a mode which also has a feature in common with segâh, in this case the prominence of the *G* - *d* pentachord, and revert to Cantemir's sequence, which proceeds from ırak, with finalis *F♯*, to rast, with finalis *G*. Alongside rast we may consider the closely related rehavi.[313]

48. rast

The following pieces are in this mode:

1, 2, 103-8, 121-3, 127, 169, 170, 185, 214, 227, 237-240, 270, 291, 300, 308-10

and it is also exemplified in 296.

The notation of 105 has no mode heading, but its identity as a piece in rast is confirmed by the index (p. 106). 214 and 291 are variants of the same piece (and for analytical purposes only the former, simpler, version will be referred to), while 298 is identical with 134, even if notated with slightly different conventions. The corpus thus totals 25, the same as 40. ırak, and one that will only be exceeded by 57. neva and 58. hüseyni.

Beginning from the pivotal (and eponymous) note *G*, Cantemir's nuclear definition (p. 24) takes the familiar form of an initial kernel consisting of three either ascending or descending (main) notes.[314] Apart from confirming that *G* is also the finalis, the following expansion adds only that there is no restriction on range: it again takes *G* as the starting point and mentions the possibility of ascent on main notes up to *e'*, followed by descent down to *D* and a return to finalis *G*.[315] The modulatory family is defined as consisting of the mürekkeb makams 23. mahur, 24. pençgâh and 34. nigriz; the ['used'] terkibs 17. nihavent, 12. büzürk and 9. salmak; the 'unused' terkibs sazkâr, türki hicaz and beyati-hisar;[316] and 49. rehavi (which has a special category of its own).[317]

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[313] A further mode which could have been considered here is 9. salmak, again with finalis *G*, while the earlier (*ḳavl-i 'atīḳ*) form of 24. pencgâh also overlaps with rast.

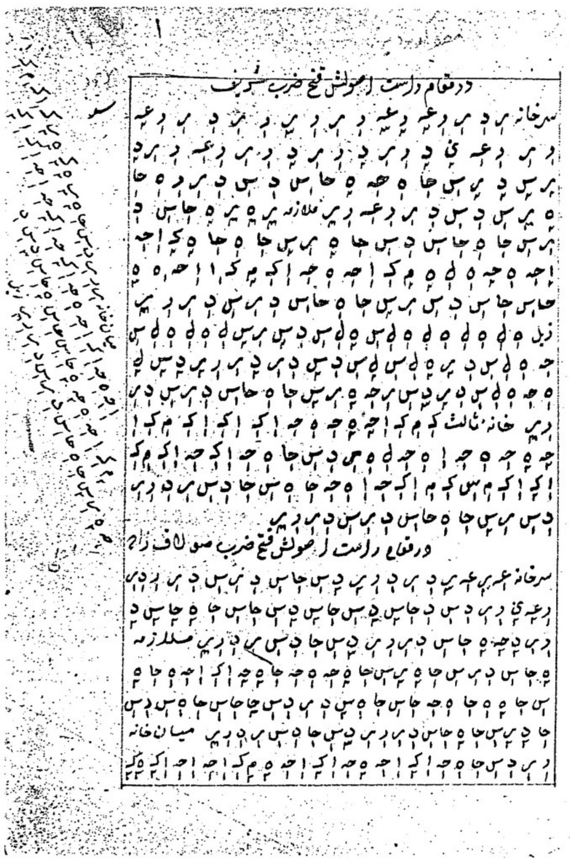
[314] راست مقامك قطب دايرهءِ پرده سى ينه راست پرده سيدر ، حركت أغازه سى كندو پرده سندن ايدوب كرك نرمدن تيزه كر(ك) تيزدن نرمه وارسه اوچ تمام پرده لرايله كندو قطبنده كندوى بيان ايدر .

[315] كندو پرده سندن تمام پرده لرايله تيز حسينييه دك چقمق حكمى واردر ، وأندن كنه اول يولدن عودت ايدوب يكاه پرده سنه دك اينر ، أندن كنه چقوب كندو پرده سنده قرار واستراحت قلر .

[316] From sazkâr on there is no punctuation to separate the names, but that beyati and hisar are a compound here and not their individual selves is shown spatially by the contrast between the wide gap separating them from the preceding entry, türki hicaz, and the narrow gap separating them from each other. But more simply and quite conclusively, one may point to the fact that by itself neither beyati not hisar belongs to the 'unused' terkib category.

[317] There follows a comment to the effect that whatever other modal affiliations might be suggested by the beginnings of these various terkibs, their use of finalis *G* confirms them within the rast group:

مزكور تركبات كرچه حركت اغازه لرى سائر مقاملردن اولور ولكن كلوب راستده قرار ايلديكلرى ايچون اكا تابع اولدوقلرى اشتباه يوقدر .



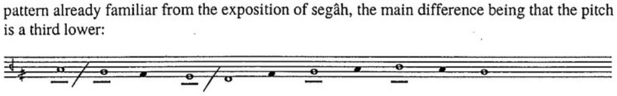
The first page of Cantemir's notations, containing 1 and the beginning of 2, both in rast

This characterization, like many others already encountered, defines such vital matters as the basic pitch set, initial and finalis, and the most crucial area of prominence. But it is otherwise rather limited, giving, for example, no hint as to where secondary areas of prominence might be located; and it is also potentially misleading with regard to the normal order of events, for if the ascending scale formulation is judged to reflect successive upwards shifts of emphasis through the course of the various sections, the prolongation of the following descent to *D* is misplaced: development of the lowest register is often the first thing to occur. Cantemir's account is also inaccurate to the extent that it fails to indicate the standard replacement of *F♯* by *F𝄲*, not only as a leading note in cadence formulae or in the *G F𝄲 G* flexure, but generally in low-register passages, although the omission is probably to be attributed not to a misconception but to an understandable reluctance to admit to the existence of a feature that so obviously runs counter to the assignment of rast to the category of main-note modes.

G is defined as the initial focus, and in the great majority of pieces it is, indeed, the first prominent note to be elaborated, emphasis frequently being placed on the tetrachord below (as in 1, 107, 309). Given the size of the corpus, however, it is by no means surprising to find that this is not the only possible opening strategy: in some cases greater initial emphasis is placed on the tri- or tetrachord above *G* (as in 105, 239), while in others the two combine (as in 2, 103) to form a zone from *D* to *B𝄳*. But more radical differences are also found: whether prefaced by a jump from *G* or not, the initial development may also be of the area around *d*, which is otherwise the second area of prominence. Precedents for such variety in the sequencing of events are not difficult to find: what is rather unusual here is the flexibility of their placing in relation to the formal segmentation of the piece, for as well as being brought forward to the beginning, development of the area around *d* may be deferred until after the completion of H1 and, as a further complication, higher register passages, the normal habitat of which is H2, sometimes appear already in H1.

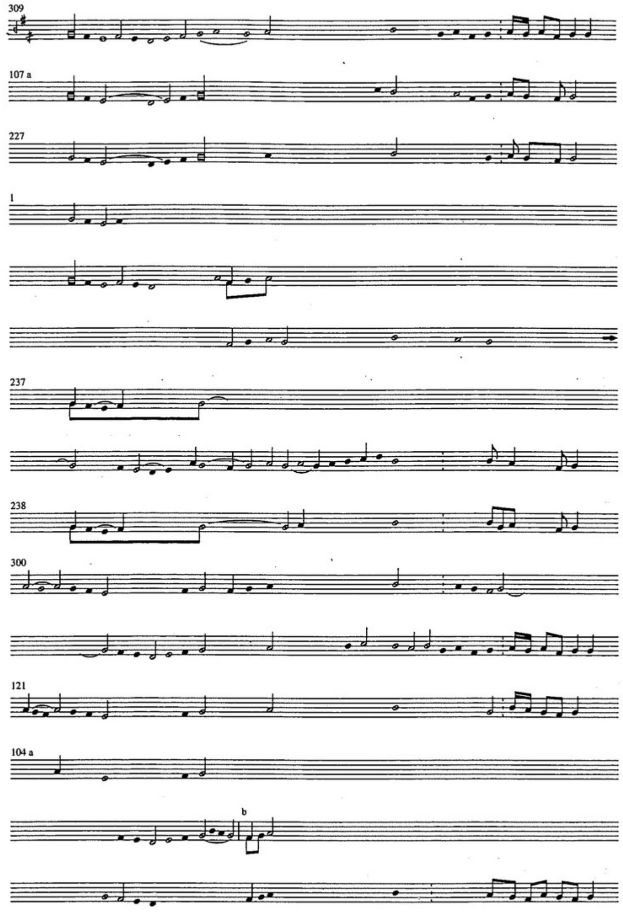
Accordingly, rather than present abstracts for the whole corpus section by section, which, given its size, would be rather unwieldy, we may divide the greater part of it into two groups. The first, surveyed in ex. 70, consists of those pieces in which the initial melodic focus is on the area around *G*,[318] while the second, surveyed in ex. 71, consists of those in which it is on the area around *d*.[319] Perhaps inevitably, the distinction is not always clear-cut: 122, certainly, could be classified as transitional, and its assignment to the second group is somewhat arbitrary.

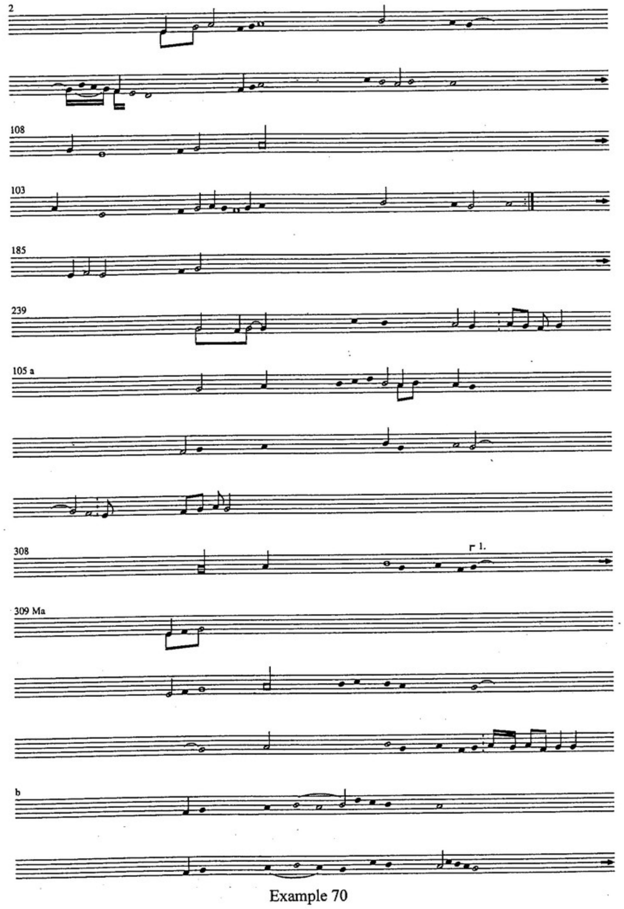
In the first group the exposition of the *D* - *B𝄳* area in many cases follows the oscillating pattern already familiar from the exposition of segâh, the main difference being that the pitch is a third lower:



[318] 1, 2, 103-5, 107, 108, 121, 185, 227, 237-9, 300, 308, 309.

[319] 122, 123, 127, 170, 240, 310.


107 a
104 a
b


2
108
103
185
239
105 a
308
1.
309 Ma
b

Example 70

The presentation in ex. 70 above covers only this area, which is not always coextensive with H1. In some cases only H1a or the first part of H1 is devoted to it, while in 309, on the other hand, it is not until near the end of Mb that the exposition is completed. Those cases where the (sub)section is left incomplete, that is, where further material follows the development of the *D* - *B𝄳* area, have been indicated by a final → (and, necessarily, the lack of a cadence). The positioning of the dotted half bar is somewhat arbitrary: if anything, the onset of the cadence area should be thought of, in most cases, and particularly in those with a mahur-type cadence, as beginning not later than *B𝄳*, so that the cadence is integrated into the final descent and does not constitute a further extension after *G* has been reached. 308 is in nim sakil, but although the pattern of percussions in this cycle is largely coincident with that of the first half of sakil (and identical for time units 1-18), the melodic structure of this piece suggests that it would be more appropriate to designate as the internally prominent nodes time units 11 and 21.

In general, it will be seen that there is a variety of possible approaches within an evidently common framework. Occasionally (as in 2 and 300) the lower (*G* - *D* - *G*) and upper (*G* - *B𝄳* - *G*) segments receive equal attention, but more frequently emphasis is placed on one at the expense of the other, the most extreme cases being 104 and 308 respectively. But while the former suggests that the treatment of the upper segment need be no more than perfunctory, the latter, together with 239, demonstrates that the lower can be dispensed with, in other words that even if the wave form is partially recursive, choice of the second *G* as the initial does not require a subsequent return to the first, while choice of the first does entail progression through the second. Of particular interest here is the larger scale development in 309 where, after the complete wave form has been traversed once in H1, Ma begins from *E* and Mb is devoted exclusively to the upper segment.

The great majority of the pieces in this first group pass on to develop the area around *d*, and it is thus at this point that the second group joins them. But the amount of material to be covered is increased by more than the addition of a further six pieces, for in both groups M also normally needs to be included,[320] and to save space the twofold exposition of the basic *G* - *d* - *G* curve which is frequently encountered will be displayed in ex. 71 in a linear rather than vertical format. Although the two are generally equivalent one minor distinction will be imposed by placing the occasional ascents to *g* (except for one instance of the formula *d g f♯ e d*) all in the second column. The groups are not segregated; rather, pieces are ordered, broadly, according to similarities in the ways they begin. Those in the first group with a final → in ex. 70 (indicating incompletion) are introduced here with an initial →. In a few cases exposition of the *G* - *d* area is followed by a reversal, indicated by ←, to the previous *D* - *B𝄳* area. Although not simple repetition, this material could readily be integrated into ex. 70 and, to save space, will not be displayed here.

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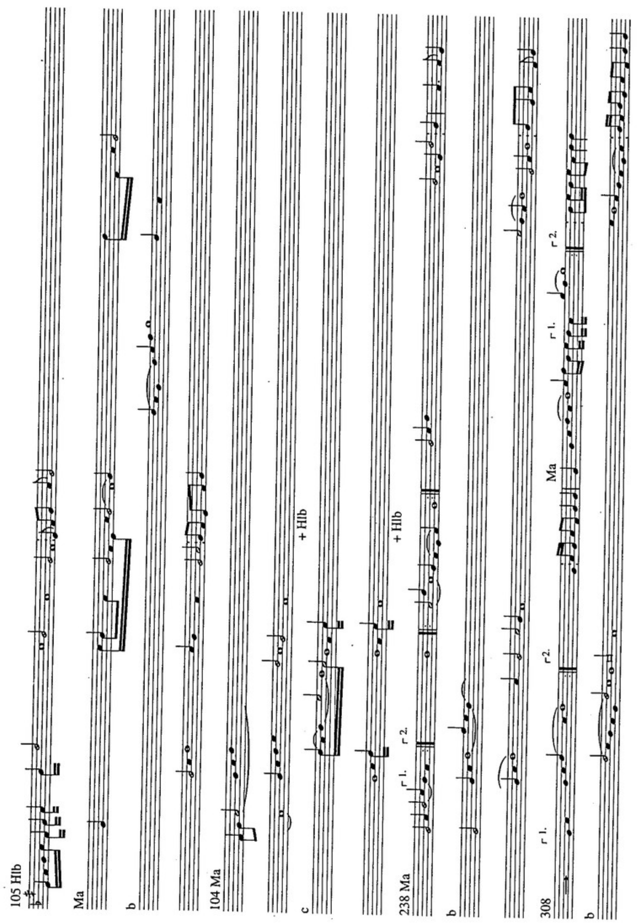
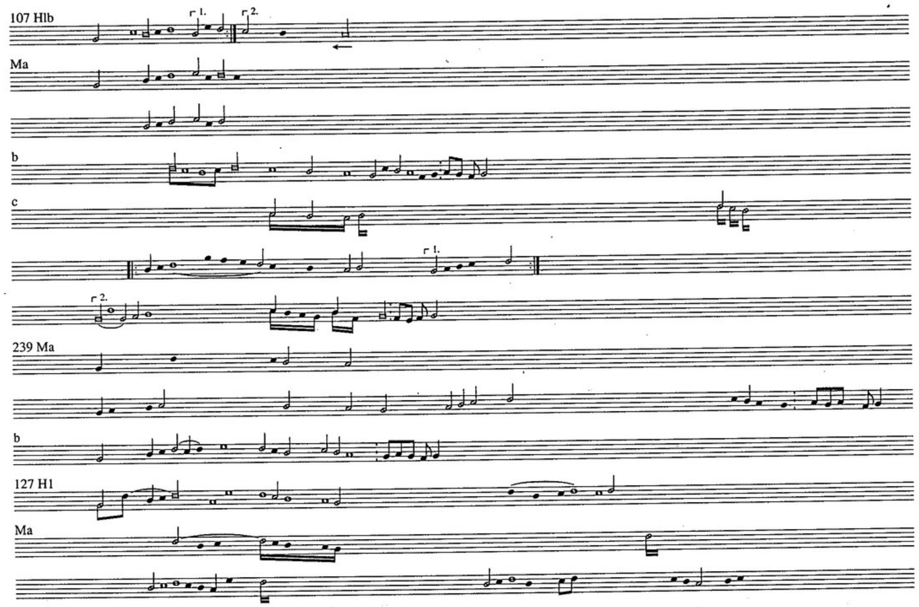
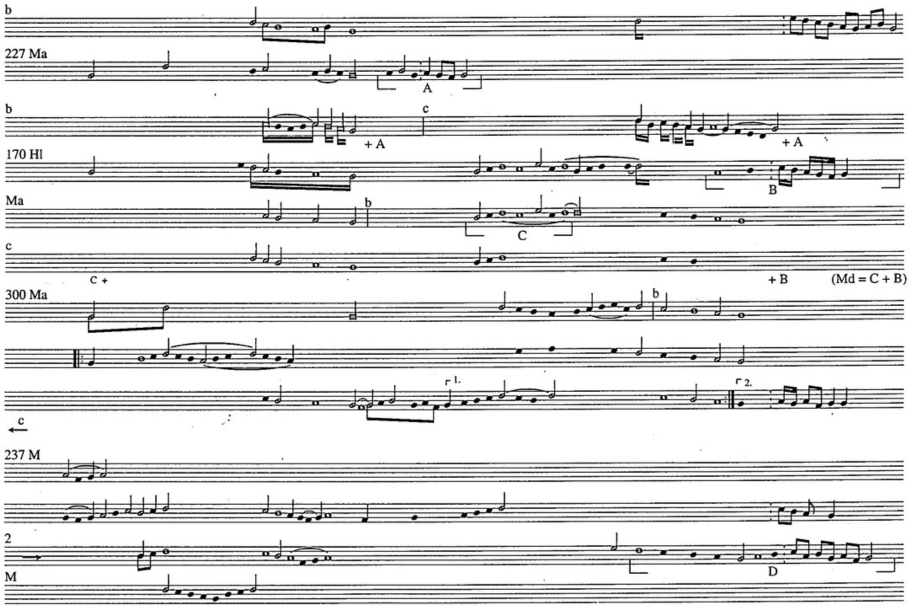
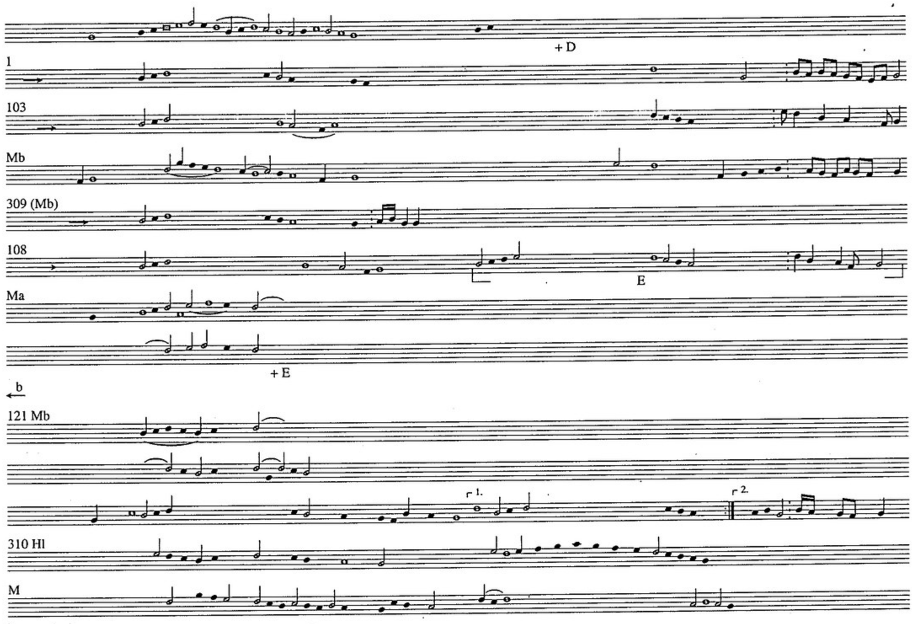
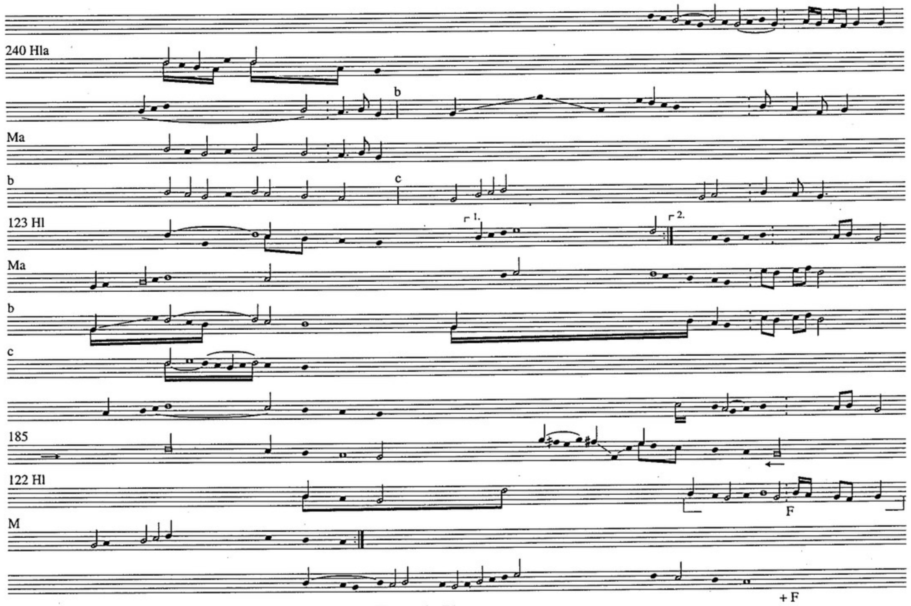
[320] Except for M in 1 and 185 (upper register); and 103 Ma, 104 Mb and 121 Ma (modulation).




107 Hlb
1.
2.
Ma
b
c
1.
2.
239 Ma
b
127 Hl
Ma


b
227 Ma
A
b
+ A
c
+ A
170 Hl
B
Ma
b
C
c
C +
+ B
(Md = C + B)
300 Ma
b
1.
2.
c
237 M
2
D
M


+ D
1
103
Mb
309 (Mb)
108
E
Ma
+ E
b
121 Mb
r 1.
r 2.
310 Hl
M


240 Hla
b
Ma
b
c
123 Hl
r 1.
r 2.
Ma
b
c
185
122 Hl
F
M
+ F

Example 71

The general strategy is thus to make elaboration of *d* the focal point, to the extent that the preceding ascent may be gapped (using a common formula that omits the preantepenultimate pitch, in this case *A*), truncated (beginning from *B*𝄳), reduced to a *G* - *d* jump, or even omitted altogether. The elaboration itself consists occasionally of a turn or variations thereof, but is more frequently concentrated either below or above and for the most part does not go beyond the *B*𝄳 - *f*♯ range. The following descent may include further elaboration of *c*, *B*𝄳 or *A*; and *A* may also terminate the first descent, functioning as a secondary intermediate cadence.

These two groups cover the great bulk of the corpus: there remain only 106, 169, 214 and 270. The reason for separating them off is not, however, because of a major typological dissimilarity in melodic strategy, although it is in fact the case that 169 and 270 rapidly shift to the upper register. What characterizes them is the fanfare-like figures based on the *G* - *d* open fifth which play a pronounced role, especially but by no means exclusively in the initial exposition (106, the most extreme example, begins *G d G d G d c d G g*). Such leaps are by no means uncommon elsewhere in the rast corpus, so that it cannot be claimed that this feature provides in itself a sound criterion for separate consideration; its advantage is, rather, that it facilitates comparisons with the pieces assigned to 49. rehavi for, extraordinary as it may seem, this was distinguished from rast, if Cantemir is to be believed, by no other characteristic than its imitation of western trumpet fanfares.[321] To the initial exposition in these pieces, given in ex. 72, may be added the continuation in 169 Ma[322] and also 1 M and H2, the opening of which is of the same type. In 106 only H1a is given: H1b and c are in the same high register (H1b also with finalis *g*, H1c with *d*).

As might have been expected, the use of an initial *G-d* fanfare-like figure is no guarantee of subsequent uniformity, but something that five of these seven (sub)sections have in common is that they venture, however briefly, into the upper register through an immediate extension of the fanfare motif to include the upper octave *g* (or, in the rather more startling case of 270, by jumping another fifth to *a*).[323] Of the other two, 1 M also contains a jump to *g* (and, subsequently, one from *d* to *a*), but develops first the *G* - *d* pentachord. Only 214 H1a remains throughout in the lower register, and only here is there an exploration, in any case held back until just before the final cadence, of the area below *G*. In the other five there follows a descent to *d* and, typically, elaboration of the area around it, so that the preceding excursion into the upper register anticipates the normal order of events, for throughout the corpus, as in the continuation of 1 included in ex. 72, the most extended development of the upper register material occurs, as expected, in H2: only in 105 and 185 does it commence in M, and only in the former does H2 revert to the lower register.

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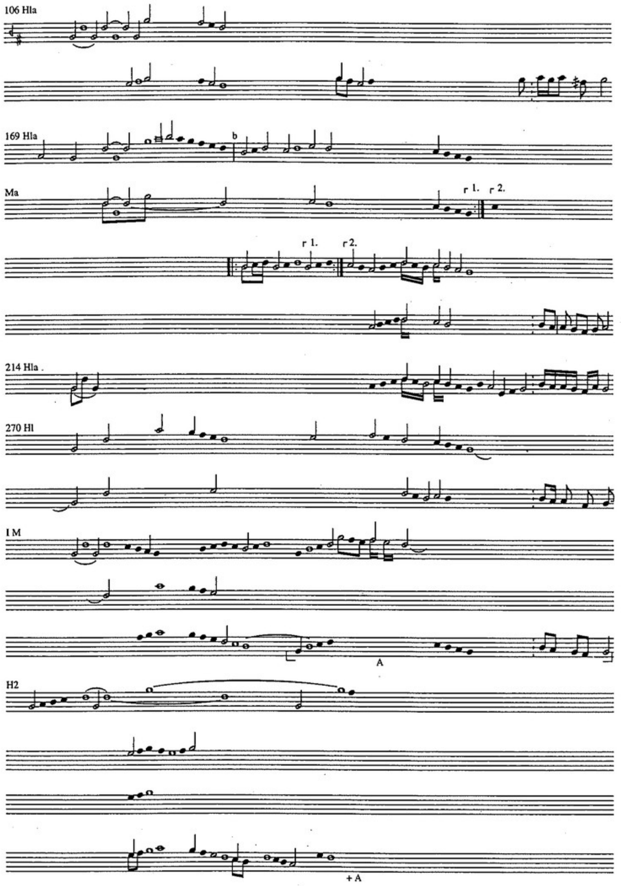
[321] p. 46. For the passage in question see 49. rehavi.

[322] Even though it ends with a suspended cadence on *A* before the expected final cadence on *G* is reached in Mb.

[323] In 106, H1a ends with an abbreviated mahur-type cadence on *g*, and H1b and c continue with a modulation in mahur (although alternatively H1b, the abstract of which resembles closely that of the beginning of the first line in ex. 70, could be regarded as a transposition up an octave of a normal low-register exposition of rast).



Example 72

Here, again, the corpus falls into two groups. In one[324] the upper register retains *f*♯ and is thus to be regarded as a further stage in the development of rast itself, while the other[325] substitutes *f*‡, thus representing a modulation into 23. mahur which, because of its very frequency, must be deemed a standard alternative in the upper register. The first group yields the profile set out in ex. 73.

Setting aside as unimportant the formulaic initial scalar transition from low to high register found in five of these pieces, confirmation of broad internal similarities is to be sought in what follows *g*, and the fact that all the material may fairly readily be subsumed under a single arch-shaped contour may be taken as a sufficient demonstration of a common compositional strategy. But within that contour there are also differences, and one may point in particular to the prominence of *a* in 127, 309 and 239 as compared with that of *g* elsewhere, suggesting two possible emphases, one on the *G* - *g* octave relationship, the other on consecutive fifths, *G* - *d* and *d* - *a*.[326] A further such parallel may be noted in the range: just as the low-register exposition in H1 (ex. 70) concentrated on (and was typically confined to) the *D* - *B*𝄳 segment, so here, too, it is rare to find any exploration above *b*𝄳, while in the ensuing descent elaboration of *d* usually develops the *d* - *g* tetrachord.

Such parallels and similarities also emerge from a comparison of ex. 73 with ex. 37, which is concerned with the exposition of mahur: after an optional initial ascent there is in both elaboration of the area around *g*, development below generally preceding that above, where *a* is also often prominent, and there is then a descent to (or through) *d*. Both modes tend to explore the same register in the same way, so that the primary criterion of differentiation is the *f*♯/*f*‡ contrast in the pitch set, and it is, accordingly, hardly surprising to find that the contour of the pieces making up the second group is also broadly in conformity with this pattern: they could readily be inserted into either ex. 37 or ex. 73, and separate presentation is unnecessary. Although it would not be unreasonable to analyse this group as representative of a common high-register variant of rast (with the substitution of *f*‡ being accounted for by the influence of its lower octave equivalent), it is not simply the case that classifying it under the rubric of modulation is more attractive because more economical: confirmation that these (sub)sections should, indeed, be assigned to mahur is provided by the fact that in three cases (106, 238 and 300) the descent to *d* is followed, as expected, by a return to the lower register, but not that of rast: the continuation through *B* rather than *B*𝄳 (which fails to appear) is a further clear pointer to mahur.[327]

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[324] It consists, in addition to 1, of H2 in 2, 103, 170, 239, 240, 309 and 310 and H2a in 127 and 227 (1 H2 could also be included, but along with M may be deferred for consideration along with the fanfare group).

[325] Somewhat larger than the first, it consists of H2 in 106, 107, 108, 122, 123, 214, 237, 270 and 308; H2a in 104, 121, 169, 238 and 300; and 227 H2b and c.

[326] To be noted in this connexion is the *d* - *a* leap in 2 and between 240a and b, which may be regarded as an echo of the common *G* - *d* leap in the lower register.

[327] A fourth case, 237, is intermediate, continuing with *B* but switching to *B*𝄳 for the cadence, while in a fifth, 121, a return through a *B*𝄳 cadence in H2a is cancelled by a further modulation in H2b, using both *f* and *B*, suggestive again of mahur, before reaching the final cadence in rast (which could, in fact, still be regarded as within the orbit of mahur). A similar progression, if divided between sections, occurs in 122, where H2b returns to rast after an upper-register passage with *f*‡, only to be followed in H3 by a low-register (*D* - *d*) development with *B*, signalling a reappearance of mahur.

As a further complication might be mentioned the theoretical possibility that just as this second group can be equated with mahur, so the first group, or at least some members of it, might be equated with 50. gerdaniye. As this is nowhere attested by name in the corpus, the only evidence is Cantemir's description, which is, essentially, of a main-note mode descending from *g* to finalis *A* (rather than *G*, thus serving to prevent it from being no more than an upper-register variant of rast). The fact that there is no instance of a final cadence on *A* is not of itself sufficient to dismiss this possibility: it is by no means rare to find a modulation which ends by switching back to the cadence of the main mode, and in this connexion one might point, for example, to 103 H2b, where finalis *G* is preceded by a suspended cadence on *A*. Unfortunately, however, it is clear from the material in the previous exposition that such a suspended cadence may also be regarded as intrinsic to rast, with the result that within the rast corpus gerdaniye becomes virtually invisible, the only piece in which its presence might possibly be detected being 170, where the finalis *B*𝄳 is no more than a link back to the initial *c* of the ritornello, the remainder thus consisting of a *g* → *A* descent corresponding exactly to Cantemir's definition.

In general, the range of modulation in the rast corpus is quite restricted, to the extent that it is possible to speak, once again, of a degree of predictability high enough to raise the question of whether certain simplex modes are potentially viewable as higher level complexes. While evidently not compounds in the sense that there is an emic perception of their resulting from a conjunction of elements found elsewhere, as, say, with the derivation of 47. ru-ye ırak from 45. segâh and 40. ırak, and while evidently autonomous and not in need of any outside addition, they neverthless do normally trigger one or two specific modulations. The relationship with these other modes, even if not, strictly speaking, one of entailment, is sufficiently habitual for the conclusion to be reached that their inclusion was a standard part of compositional strategy, and to that extent the composer must have conceived 'rast', say, as consisting potentially of rast + *x*, where *x* denotes not any other compatible mode but one (or more) from a very restricted range, consisting in this case of mahur, conceivably gerdaniye, and the hicaz family, of which the preferred member—not unexpectedly, given the common use of *G* as finalis—is 34. nigriz.[328]

Within such a large corpus other modulations will inevitably occur. There are, nevertheless, remarkably few involving a change of pitch set.[329] More difficult to detect, as usual, or properly to categorize, are passages without any change of pitch set which might be regarded as modulations or, conceivably, areas of overlap, the most obvious examples being 107 H3a and b, which in isolation would presumably be identified as 55. uşşak, and 240 H3a, which

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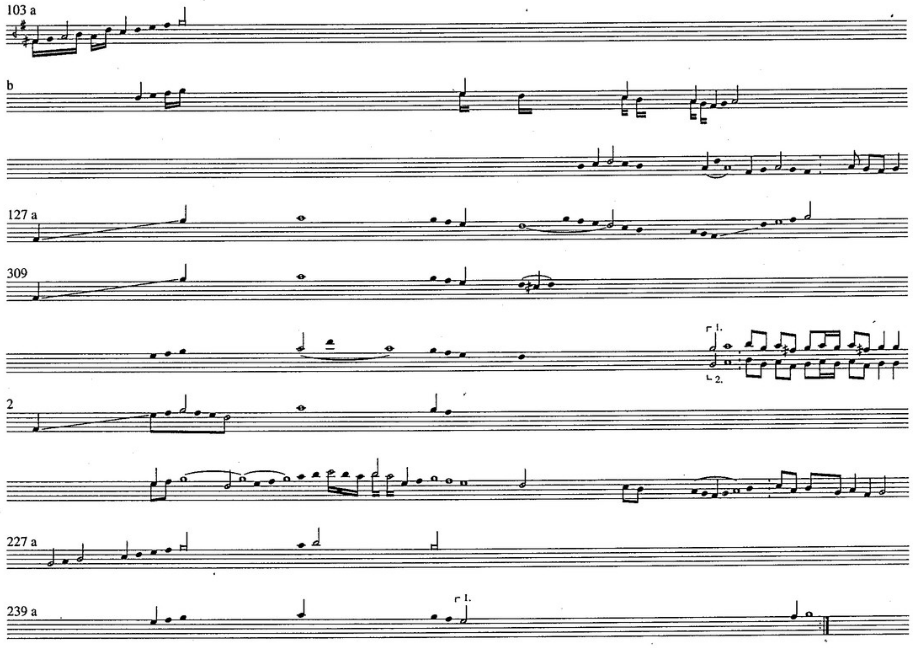
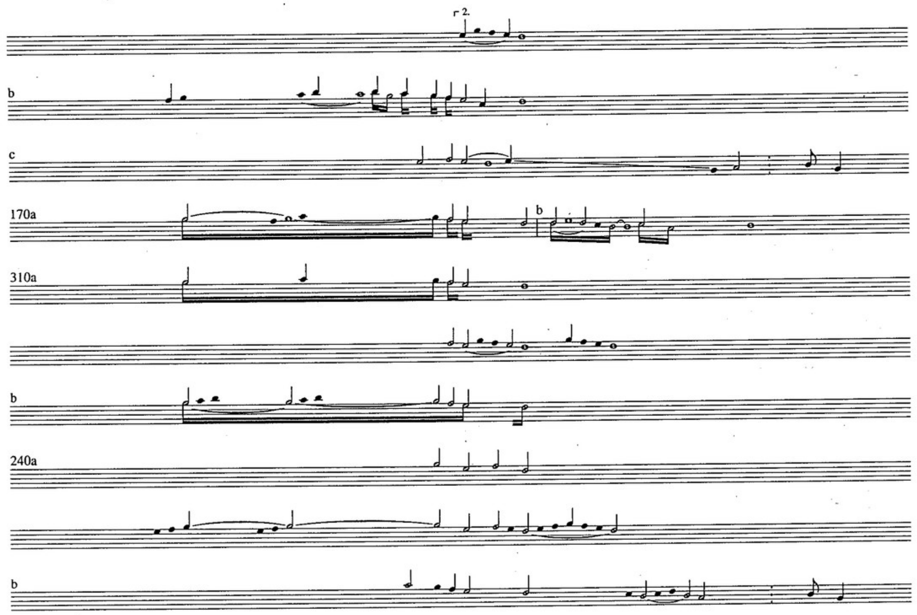
[328] Recourse to nigriz is most frequently had in H3, where it appears in 2, 103, 106, 108, 127, 214, 237, 270 and 300; but it is not confined to that position, occurring also in 1 Z, 104 Mb, 121 Ma and 185 H2 (so that it co-occurs with mahur in 104, 108 and 300). However, the identity of nigriz may only be established after a passage which by itself would be assigned to 30. hicaz, while it may also be followed by material that is more hicaz-like in cast, and the presence of hicaz can, accordingly, be detected among the above in 2, 106, 108, 127 and 237, while it also appears independently of nigriz in 107 H2e (H2d initially suggesting 31. uzzal), 127 H2b, 238 H3 and 308 H3.

[329] 25. saba appears briefly in 170 H3a (with final *c*), the same material then being transposed down a third in H3b, the pitch set of which (*F*‡ *G A B*♭) suggests 17. nihavent, and a yet to be identified modulation involving the juxtaposition of *B*𝄳 and *B* occurs in 121 Ma.

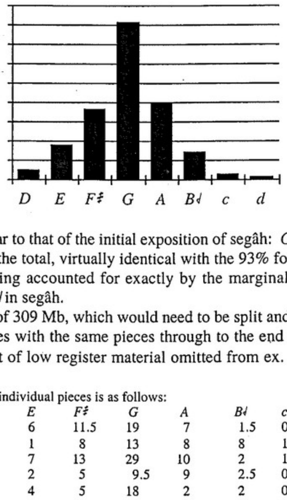




Example 73

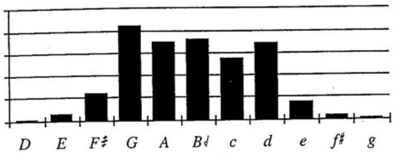
veers from rast towards segâh. But a more acute problem is posed by the many (sub)sections, not all tucked away in H3, some, indeed, constituting H1, which consist of a *d* → *G* descent. It has been assumed, at least tacitly, that these are simply part and parcel of rast, but at the same time they conform exactly to the norms of the exposition of 9. salmak, and it will be necessary to revert below to the relationship between these two modes.

In general, the material in H3 that does not modulate conforms to previous norms in its reworking of rast: the one exceptional feature is the extremely wide range, from *D* to *e'*, exhibited in 185, but even this results from nothing more than a particularly extensive use of a standard ploy in H3, the scalar passage. We may, accordingly, pass on to the survey of relative duration, covering in the first display the low register material displayed in ex. 70, but including only those pieces where the relevant (sub)section is complete. In 300 it is the seconda volta (= teslim) version that is counted, so that we have:[330]



This profile is very similar to that of the initial exposition of segâh: *G* and the two notes either side account for 95% of the total, virtually identical with the 93% for the *G* - *d* pentachord in segâh, the difference being accounted for exactly by the marginally higher peak for *G* as compared with that for *B*♭ in segâh.

With the exception of 309 Mb, which would need to be split and is therefore omitted, the second display continues with the same pieces through to the end of M and in some cases, therefore, takes account of low register material omitted from ex. 71 (where its location is indicated by ←) but necessarily included here. Since it is at this point that the two groups come together both H1 and M have been added from a selection of four pieces from the second group: 122, 123, 127 and 240.[331] *f* is subsumed under *f*♯, so that we have in all:[332]



From the very pronounced peak on *G* in the first group we thus move here to a far more even spread over the *G* - *d* pentachord, which accounts for 87% of a whole.

With these figures may be compared those for the third group. Excluded from the sections represented in ex. 72 is 1 H2, while for all the pieces except 1 and 214 the statistics cover all of H1 and M.[333] *f* and *f*♯ are subsumed under *f*♯, and *c*♯ under *c*. *c'* (one time unit in 169) is omitted, so that we have:[334]

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[330] The breakdown for the individual pieces is as follows:

		D	*E*	*F*♯	*G*	*A*	*B*♭	*c*	*d*
104	H1	3	6	11.5	19	7	1.5	0	0
105	H1a	0	1	8	13	8	8	1	1
107	H1a	2	7	13	29	10	2	1	0
121	H1	0	2	5	9.5	9	2.5	0	0
227	H1	1	4	5	18	2	2	0	0
237	H1	1	4	8	18	12	4	0.5	0.5
239	H1	0	0	3	13	5	2	1	0
300	H1	2	6	12	21	15	5	2	1
309	H1+Ma	2	10.5	16	39.5	21.5	5	1	0.5
		11	40.5	81.5	180	89.5	32	6.5	3

[331] Of the internal repeats in 107 H1b only the seconda volta segments (i.e. 5-8, 13-20) have been counted, and similarly in 121 Mb (5-8), 300 Mb (9-18) and Mc (where seconda volta = teslim).

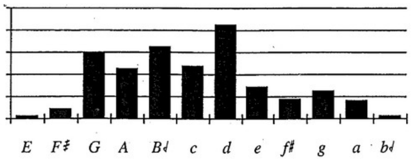
[332] The breakdown for the individual pieces is as follows:

		D	*E*	*F*♯	*G*	*A*	*B*♭	*c*	*d*	*e*	*f*♯	*g*
104	Ma,c	1	3	16	21	23	16.5	17.5	16	6	0	0
105	H1b+Ma,b	0	4	12	26	19	16	12	10	2	1	2
107	H1b+M	2	10	20	70	51	49	42	73	23	2	2
121	Mb	0	0	3	10.5	5.5	13.5	8	13	2.5	0	0
227	M	1	1	10	45	28	26.5	14	2.5	0	0	0
237	M	0	0	4	10	16	11	12	7	0	0	0
239	M	0	0	2	17	18	15.5	12	10.5	3	0	0
300	M	1	4.5	18.5	54	42	22.5	14.5	23.5	2	1	0.5
122	H1+M	0	0	8	24.5	19	26	10	8.5	1.5	0.5	0
123	H1+M	0	0	0	20	18.5	36.5	30.5	39.5	11	4	0
127	H1+M	0	0	0	24	17.5	29.5	28	39.5	5.5	0	0
240	H1+M	0	0	1	17	21	26	20	28	4	2	1
		5	22.5	94.5	339	278.5	288.5	220.5	271	60.5	10.5	5.5

[333] In 1 only M is covered, while in 214, where the prevalence of *f*♯ in H1b and Mc indicated a shift to mahur, only H1a and Ma and b are included. Of the internal repeat in 106 Mb only the seconda volta segment has been counted.

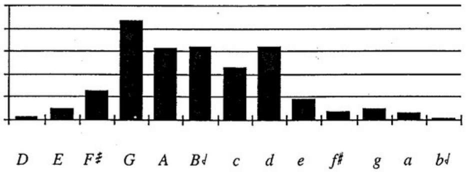
[334] The breakdown for the individual pieces is as follows:

	E	*F*♯	*G*	*A*	*B*♭	*c*	*d*	*e*	*f*♯	*g*	*a*	*b*♭
106	1	5	39	15	19	21	57	26	30	47.5	23.5	4
169	0	5	30.5	37.5	66	53	83	16	5	12	9	2
214	3	5.5	33.5	43.5	39.5	18	13.5	3.5	0	0	0	0
270	0	6	42	21	37	25	54	24	4	2	5	0
1	0	1	17	5	12	10	21.5	6.5	6.5	4.5	4	0
	4	22.5	162	122	173.5	127	229	76	45.5	66	41.5	6



Thus despite the initial forays into the upper register, reflected in the somewhat higher values for the notes above *d* (and the lower ones for those below *G*), it is again the *G* - *d* pentachord that is salient, with (a slightly lower) 76% of the total.

The sum of all three groups is:



Not unexpectedly, this final composite profile is hardly to be distinguished from that for the second group above: the only difference is a marginal lowering of the notes within the *G* - *d* pentachord (but not *G* and *d* themselves) to accommodate the slightly enhanced representation of the higher register.

49. rehavi

The following pieces are in this mode:

125, 241, 245, 297, 337

and it is also exemplified in 296.

Reference has already been made to the surprising distinction drawn by Cantemir between rehavi and rast according to which the former was characterized by its imitation of western trumpet fanfares. It may be assumed, therefore, that in other respects (pitch set, identity of initial and finalis) no significant differences were discernible, so that without its fanfare figuration rehavi would coincide with rast. That such could be the case is neatly and conclusively demonstrated by the fact that 125, identified as in rehavi, is identical with 309, identified as in rast, and congruence between these two modes is, indeed, the first point stressed by Cantemir in his account of rehavi (pp. 47-8). But already the special category in which he places it indicates that, for him, its existence as an independent entity verged on the

illusory: it is a makam (not, interestingly, a mere terkib, suggesting that it had not been wholly degraded from its previously exalted status as a member of the most important and prestigious of all mode sets) that, loosely and rather fancifully translated, is classified as 'of fair renown but slender means' or, more prosaically, 'known but barely existing'.[335] This is hardly surprising in view of the fact that when, after further preliminary remarks, Cantemir supplies a basic description, it is of a mode that begins from *G*, proceeds like rast (whether on higher or lower notes) and also has *G* as finalis, and he does in fact add that, as described, it is not to be distinguished from rast.[336] But he then goes on to say that according to contemporary musicians (*bu zamāneniñ mūsīḳīşināslar*) it is the imitation of western trumpet fanfares that provides its distinctive melodic outline, for which the following definition is then reported: beginning from *G* one jumps to *D* (played sforzando and staccato);[337] does not insist overmuch on *F♯*; and ascends on main notes to *d* (according it a certain degree of emphasis). From *d* one jumps to *g*, sounding now *g* and now *d*, again sforzando and staccato. One should then dwell somewhat on *g*, thereafter ascending in a similar fashion to *d'* and returning with the same oscillating, i.e. fanfare-like, melodic gestures as before to end on finalis *G*.[338]

At this juncture Cantemir goes on to refer to earlier authorities (*edvār-ı ḳadīm*), stating that although they define rehavi differently, they also give two versions. The (only) definition quoted later (p. 72) is presumably one of these, but it fails to shed any light on the rehavi of Cantemir's day.[339] The important point, rather, is the reference to two versions, which suggests that the coexistence of two types of rehavi in Cantemir's day may not necessarily reflect a recent bifurcation. However, at the very end of his quite lengthy account Cantemir seeks, in effect, to undermine the rationale for any such distinction, implicitly denying the independence of either form from rast: reverting to his initial classificatory designation, he adds in explanation of the phrase *ismi var cismi yok* that the name exists because of its [individual] melodic movement, while the claim that there is no corresponding entity relates to the lack of both distinctive pitch-set features and distinctive initial melodic features: even the fanfare element, he claims, imitates rast. There is a certain inconsistency here, the first statement being partially contradicted by the latter part of the second: but rather than taxing Cantemir with illogicality, the point to be emphasized is that by the very fact of questioning the status of the fanfare element as an adequate ground of modal independence he does at least recognize its existence.

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[335] The (Arabic) original here, *mevcūd ül-isim ma'dūd ül-cisim*, is rather curious, and it might be suggested that *ma'dūd* is a distortion (evidently deliberate, as it provides an internal rhyme) of an original *ma'dūm*, which is the antonym ('nonexistent') of *mevcūd* ('existing'), yielding, therefore, the blunter meaning 'the name exists but there is no corresponding entity', and that this is what Cantemir intended is made clear by the equally blunt Turkish equivalent that he immediately proceeds to supply: *ismi var cismi yok.*

[336] رهاوی موجود الاسم معدود الجسم مقام بو مقامك اسمی وار جسمی يوق ديديكمز ايچون كمسه تعجب ايلمسون زيرا تشريخی بيان اولدقدنصكره هر كمسنه نك مشكلی حل اولور،/ مقام مرقوم اغازهٔ حركتنی راست پرده سندن شروع ايدر وتمام پرده لرايله كرك نرمده كرك تيزده راست مقامك شكلنده حركت ايدر وراست پرده سنده كلوب قرار استراحت قلر ، تشريخی مشروخ اوزره بيان وعيّان اولديكی راست مقامندن بر وجهيله فرقی يوقدر.

[337] As the first two words of the expression used (*birden açup ḳopmaḳ*) already imply a degree of suddenness of transition and attack, the third may be considered to indicate less a (sudden or violent) onset than an abrupt breaking off.

[338] لكن اكاه اولكی بو زمانه نك موسيقی شناسلر رهاویءِ راستدن نه وجه اوزره فصل ايدرلر ، ديمك استرلر كه ، رهاوی مقامی افرنج طرانبته سنه تقليد ايدوب يالكز رويش نغمه سی ايله فرق اولنور ، رويشينی ده بو وجه اوزره تعريف ايدرلر . راست پرده سندن اغازه ايدوب يكاه پرده سی ايله بردن اچوب قپمق لازمدر ، وزنكه پرده سنی پكچه نديرنمك اقتضا ايدر ديرلر ، آندن نوا پرده سنه تمام پرده لر ايله كلوب نوای بر خوشچه كوستريلمه ليدر ، نوادن دخی بردن كردانيه پرده سنه چقوب كاه كردانيه ، كاه نوا ، پرده سنی باصوب واچوب قپمغله كردانيه پرده سنده بر آز مكس ايلمليدر ، آندن كنه اول جنس حركت ايله تيز نوايه دك چقار وكنه كلدوكی يولدن عودت ايدوب اغازه سنی ونغمه سنی تدره دوب راست پرده سنك قراركاهنه واروب استراحت قلر .

[339] It suggests a stepwise descent to a finalis *A* (with which is associated a leadingnote *G♯*) and evidently represents an earlier form of no relevance to the notated corpus.

If 125 provides the perfect example of the type of rehavi that is indistinguishable from rast, the fanfare type is most clearly represented by the brief sample in 296, the fundamental outline of which is *D G d G D G.* The extent to which the remaining four pieces veer towards one or the other extreme may best be shown in ex. 74 by displaying the exposition over the whole range of H1 and M.[340]

(337 is in the rhythmic cycle evsat, where time units 6, 14 and 19 appear to represent the internally prominent nodes.)

The general strategy of 245 H1 thus resembles that of 296, and its beginning, even more closely, that sketched in Cantemir's report of his contemporaries' prescriptions,[341] right down to the fleeting inclusion of *f*𝄲.[342] But 245 Ma already begins to look much more like rast,[343] and the remaining rehavi pieces could be plotted without difficulty onto ex. 73. In most cases they complete the *G* → *d* → *G* trajectory only once in each (sub)section, but as exceptions are provided by both M and (somewhat disguised by the presentation) H1 in 337 this cannot be crucial, which leaves as the one feature that might, in the light of Cantemir's discussion, serve as a criterion of modal discrimination not the simple fact of the inclusion of leaps of a fourth or fifth but their position and incidence. That a differentiation may have been perceived within the fanfare area common to both rast and rehavi is suggested by the beginnings of 296 and 243 when contrasted with those of comparable rast pieces, which should here be taken to include those in the first group, also characterized by initial development of the *D - G* tetrachord. However, none have an opening jump from *G* to *D* (or from *D* to *G*). Indeed, this particular interval is absent both from the pieces in the first group and from those in the third, thus suggesting as a possible contrastive feature not only the *D - G* onset of 296 but also its concluding *G - D - G* gesture (which also occurs just before the cadence formula in 297 H1e): comparison between ex. 74 and 3x. 72, where the fanfare-like elements are more extended, but always have *G* as the lowest note, lends strong support to the conclusion that the use of the *G - D* (or *D - G*) interval is both specific to and characteristic of rehavi. However, even if its inclusion could be sufficient to distinguish 296, 245 and, ultimately,

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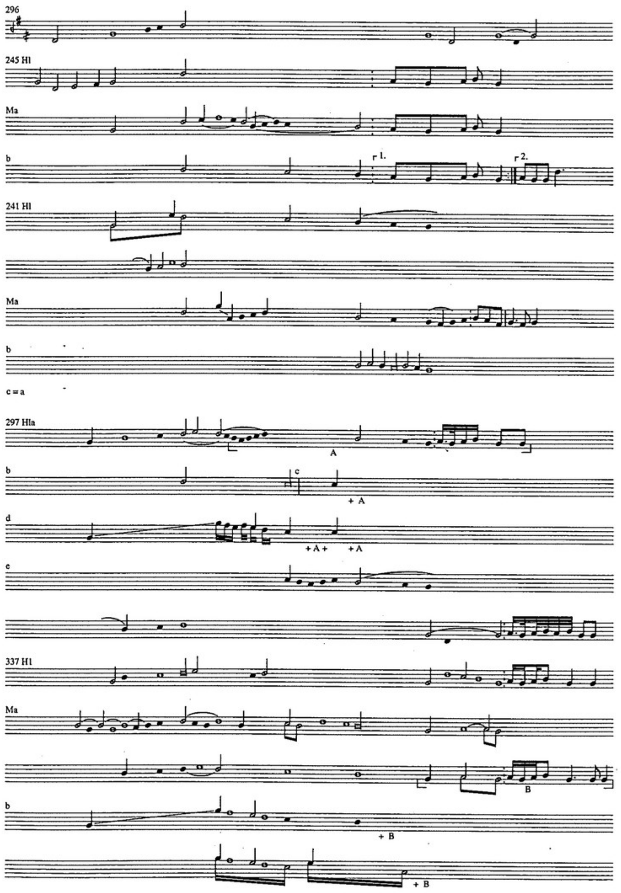
[340] Except in 297, which has no M.

[341] It was presumably the fanfare-like elements in this piece that attracted the attention of Sanal (see notes to Part i): but it is the only rehavi piece in Cantemir's corpus to be included in his *Mehter musikisi*, while one may also note that it contains 237, a semai in rast which fails to exhibit similar features.

[342] Its only appearance, save for a pre-cadential flexure in 241, outside 125.

[343] For a rather unexpected comparison one might try 2 M:11-48.



Example 74

297 from the rast corpus, something else is required in 241 and 337. As the contour of 241 H1 resembles that of rast 170 H1 1-2 and, if at a slightly greater remove, that of rast 127 H1, one needs to pursue the search in M, but here, too, parallels to the *d* - *g* jump are provided by rast 103 Mb and 107 Mc. In 337, on the other hand, we do find an obviously individual feature, the alternation of *G* and *B*𝄳 with which Ma opens: but this is most readily interpreted not as a particular feature of rehavi but as a temporary modulation into segâh; and while it is true that 337 H1 also switches rapidly between the two melodic poles of *G* and *d*, it is by no means unique in doing so. Provisionally, therefore, 241 and 337 are to be classed, along with 125, at the rast end of the spectrum.[344]

The pieces in the third rast group were isolated from the remainder precisely because of the fanfare-like passages they contain, in the light of which it is not difficult to understand Cantemir's contention that the fanfare elements in rehavi are also imitations of rast, especially as the incidence of such passages in these rast pieces exceeds anything to be found in the rehavi corpus. The fact that, on the evidence surveyed in exs. 72 and 74, the tessitura of the fanfares is characteristically lower in rehavi (*D* - *G* - *d*) than in rast (*G* - *d* - *g*) does not undermine the argument from typological similarity, especially when account is taken of the reference made in the rehavi definition to similar fanfare-like alternations of *d* and *g*. Here, however, prescription and practice part company, for whereas such alternations are attested in rast, in rehavi they fail to fulfil the expectation that, being absent from the exposition in H1 and M, they will make their appearance in H2.[345]

From the lack of fanfare elements alone it cannot be concluded that H2 is necessarily devoid of differentiating features. But none are to be detected in 241 which, indeed, goes so far as to underline its resemblance to rast by combining the two major types encountered there, beginning with material in 23. mahur and then, by substituting *f*♯ for *f*𝄰, repeating it in rast (although ending on *a* rather than *g*). Another form of resemblance appears in 337, where the beginning of H2a closely resembles that of 310 H2b (in rast), but thereafter the stress on the higher notes *c'* and *d'* is not something readily matched in the rast corpus; and matters become rather more interesting, and complex, when 337 is compared with 297, for here a rather similar melodic profile, again with considerable stress on the high register, is found in H3. Added to this material in ex. 75 is 245 H2a which, despite its brevity, also gives prominence to *d'*.

It is conceivable that we have here evidence for the emergence of a set of combinatory preferences linking elements in a way analogous to that found in 9. salmak. In salmak or, more precisely, the one piece assigned to it, it appears impossible to detect in H1 and M any feature differentiating it from rast, and it is clear that ex. 19 could easily be integrated into ex. 71. The related display of duration is, admittedly, not quite the same but, as ever, the evidence of a single piece is in this respect hardly conclusive, so that we are left with the likelihood that the crucial distinction is to be found in the contrastive material introduced in the later sections. In rehavi, likewise, the individual trajectory of H2 could have served to bolster the independence of a rast-related mode the initial core of which had come to have an

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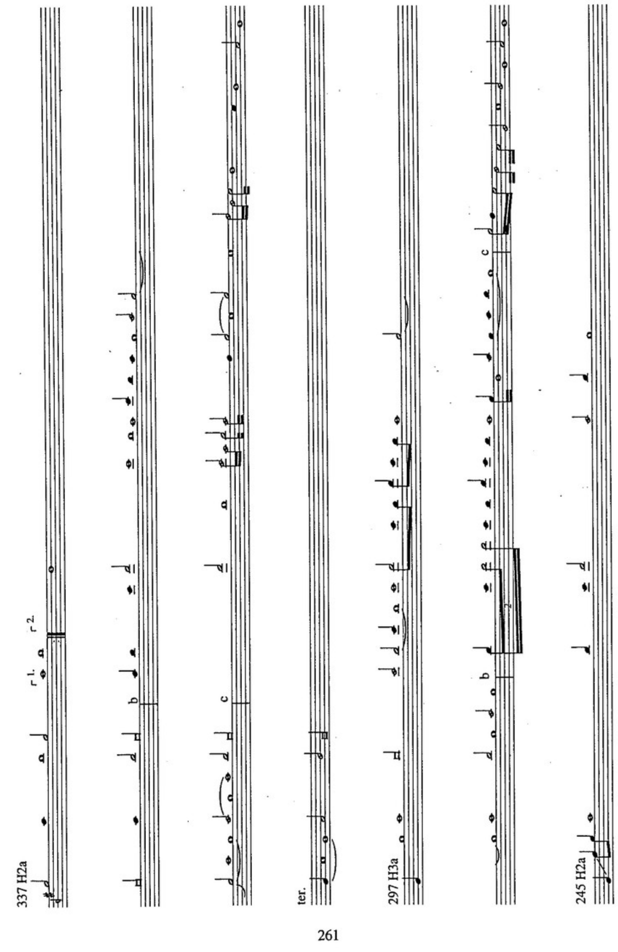
[344] Hardly surprising, therefore, that Ezgi (see notes to Part i) should regard 337 as being in rast.

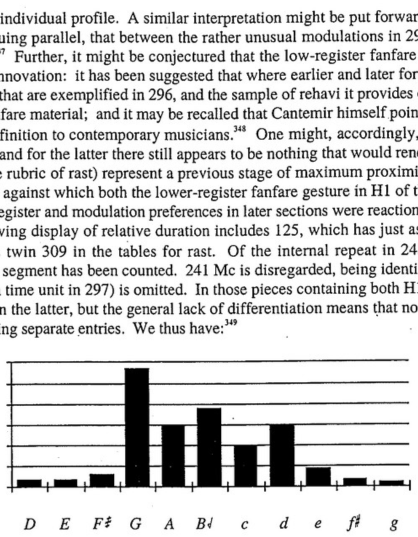
[345] In only one piece, 337, do we encounter an example.



Example 75

insufficiently individual profile. A similar interpretation might be put forward in relation to another intriguing parallel, that between the rather unusual modulations in 297 H2a and b[346] and 337 H3.[347] Further, it might be conjectured that the low-register fanfare element was a fairly recent innovation: it has been suggested that where earlier and later forms coexist it is the later ones that are exemplified in 296, and the sample of rehavi it provides consists almost entirely of fanfare material; and it may be recalled that Cantemir himself pointedly attributes the fanfare definition to contemporary musicians.[348] One might, accordingly, speculate that 125 and 241 (and for the latter there still appears to be nothing that would render illegitimate the alternative rubric of rast) represent a previous stage of maximum proximity and reduced independence against which both the lower-register fanfare gesture in H1 of the other pieces and the high register and modulation preferences in later sections were reactions.

The following display of relative duration includes 125, which has just as much right to be here as its twin 309 in the tables for rast. Of the internal repeat in 245 Mb only the seconda volta segment has been counted. 241 Mc is disregarded, being identical with Ma. *a* (a quarter of a time unit in 297) is omitted. In those pieces containing both H1 and M, *f♯* and *g* only occur in the latter, but the general lack of differentiation means that nothing would be gained by giving separate entries. We thus have:[349]



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346 As this material does not correspond to any of the modes described by Cantemir it is conceivable that it could be understood as a transposition up a fourth of rehavi proper (with *e* replacing the non-existent *e𝄳*). If so, the interpretation of it as an innovatory differentiation is, if anything, strengthened. H2c reverts to rehavi before the introduction of yet another modulation, into nihavent.

347 But elsewhere no particular pattern is to be observed in H2 and H3: 125 H3 reverts to the *G* - *d* pentachord; 241 H3 has a modulation into hicaz and uzzal; and 245 H3 contains (after a straightforward example of hicaz in H2 b) an unusual hicaz-type modulation with *B♭* rather than *B𝄳*, and descending below *A* to *G* and *F♯*.

348 And one might further add that 245, which in H1 conforms so closely to that definition, contains in H3 an unusual hicaz-type modulation with *B♭* rather than *B𝄳*, suggestive also of a relatively late date.

349 The breakdown for the individual pieces is as follows:

	D	*E*	*F♯*	*G*	*A*	*B𝄳*	*c*	*d*	*e*	*f♯*	*g*
125	2	9	16	50	38	23.5	3.5	2	0	0	0
296	4.5	0	0	11.5	0.5	1	0.5	2	0	0	0
245	4	2	1	19	5	11.5	7.5	19	1.5	1	0.5
241	0	0	3	15	16	19	10	18	7	1	1
297	0	0	0	12.75	10.75	21.25	15.75	15	4.25	2.5	1.5
337	0	0	0	83	30	51	28	42	16	6	4
	10.5	11	20	191.25	100.25	127.25	64.25	98	28.75	10.5	7

This profile is quite close to that of the second rast display, if with a slightly more pronounced peak on *G*. The general predominance of the *G* - *d* pentachord, which accounts for no less than 87% of the total, is identical in both, but the internal distribution is not, the peak on *G* being compensated for by troughs elsewhere: both *A* and *c* are markedly less salient than their neighbours. It would be difficult to argue, however, that these variations are sufficiently pronounced to be deemed contrastive, so that whatever differences between rast and rehavi there may have been in the area covered fail to manifest themselves in the domain of relative salience.

Such problems of demarcation raise again the question of the extent to which the description or definition of a given mode can be neatly packaged as an individual entity separate from others with which it partially overlaps or is in some way contiguous. For rast a standard contrastive modulatory relationship with nigriz has been noted, but of greater significance is the particular constellation of proximate modes, which consists of mahur (and, possibly, gerdaniye) in the upper register and in the lower, in addition to rehavi and salmak of (the older form of) 24. pençgâh, thus suggesting the possibility of an (at least) threefold modal overlap, as in e.g. 241 H1, nominally in rehavi but as exposition not readily to be distinguished from rast or salmak.[350] With pençgâh we can also, with hindsight, single out for attention further passages of fanfare-like material (more akin to the rast than to the rehavi model), even if these are differentiated by position, occurring later; and in general, despite evident similarities, it is possible to detect a rather more marked differentiation between pençgâh and rast, apparent both in the emphasis on *d* as the initial focus in pençgâh (a feature shared, however, by some rast pieces) and in the higher level of its salience as manifested in the figures for duration (25% as against 16% in rast). But that there is overlap nevertheless is shown by the fact that 'Alī Ufḳī has no separate pençgâh category and assigns the five pieces in his collection that for Cantemir are in pençgâh all to rast—while elsewhere he gives to two vocal entries the composite heading rast-pençgâh.[351]

2.2.11 *High-register modes*

In the light of the above it would be sensible to consider next the other mode relatable to rast and, before reverting to Cantemir's order, which proceeds from rast to 54. dügâh, to take account also of the others which he places in the same general category or regards as in some way similar.

50. gerdaniye

The category in question is that of high-note makams, the other members of which are 44. eviç and 51. muhayyer. To judge by Cantemir's account (pp. 33-4), gerdaniye can be regarded as occupying an intermediate zone between the rast group and the remaining cluster of main-note modes, dominated by 58. hüseyni and 57. neva, with which it shares the characteristic of cadencing on *A*.

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350 The relationship between these various modes is also, incidentally, underlined by the order of pieces in the collection: 120-3 rast, 124 salmak, 125 rehavi, 126 pençgâh, 127 rast, 128 pençgâh.

351 120b/233 and 122b/235.

The nuclear description begins, as so often, by mentioning the eponymous note, in this case *g*. But instead of then immediately specifying a number of basic features it proceeds by indirection, implying that the finalis must be *A* because if it were the lower octave note *G* there would be no distinction between gerdaniye and 48. rast, of which it would be no more than an upper-register variant.[352] It is then defined as a simple descending line with initial *g* and finalis *A*: *g f♯ e d c B*𝄳 *A*, but Cantemir adds the intriguing comment that it is very difficult to distinguish it from 52. arazbar and 53. baba tahir, although among musicians it is known that arazbar is related to 26. beyati while baba tahir is closer to gerdaniye. (Consulting the definitions he supplies for these two modes (p. 54) only serves to exacerbate the problem, for similarity with gerdaniye is now invoked in relation to arazbar rather than baba tahir.)

The following extension, to which corresponds the normal marginal heading *ḥükm-i gerdaniye*, begins with the unsettling remark that Cantemir has already stated that it has no wider range or domain (*ḥüküm*). The justification for this could lie in the previous discussion about the need to have *A* rather than *G* as finalis, which might possibly imply that its range was restricted at least to the extent that it did not descend below *A*, but as it does not exclude a possible extension upwards such an explanation is not wholly satisfactory. In any event, for Cantemir gerdaniye consequently functions as a terkib which has no connexion with other makams, and as a result there are no compositions in it.[353]

However unexpected such a conclusion may be, it is certainly borne out for the instrumental repertoire by Cantemir's corpus of notations, which fails to provide a single piece in gerdaniye, and its parallel absence from the ʻAlī Ufḳī collection suggests that it was no better represented among vocal compositions. It is thus self-effacing to the point of invisibility, and must be considered equivalent to one of the 'unused' terkibs occasionally referred to in the *edvār* but at best marginal in practice. It is, surely, indicative that Cantemir does, at the very end of his account, inadvertently refer to it as a terkib, and the apparent importance that the *edvār* accords it as one of the three high-note makams may readily be explained by the simple fact that, in a system where the main-note makams are presented in a rising linear sequence of prominent notes, it fills what would otherwise be a gap between eviç, with prominent *f♯*, and muhayyer, with prominent *a*. The gap, it might be suggested, results from a self-imposed limitation, namely Cantemir's discrimination, which in this context is essentially no more than an arbitrary classificatory tool, between main-note modes and secondary-note modes. If one has regard simply to high-low pairings the functional equivalent for *g/G* of the pairs eviç/ırak (*f♯/F♯*) and muhayyer/huseyni (*a/A*) is mahur/rast;[354] but mahur is disqualified because it belongs to the secondary-note category. The prominent position assigned to gerdaniye within Cantemir's presentation of the modes is thus one generated by a specifically theoretical constraint, and to that extent its absence from the repertoire need occasion no surprise.

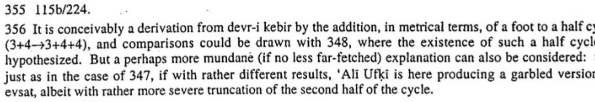
Nevertheless, the later re-emergence of this mode, which becomes sufficiently well established to generate compounds such as gerdaniye-kürdi, can hardly have been the result of a conscious act of historical recreation. It must be assumed that in Cantemir's day gerdaniye was not quite moribund, however faint its pulse. But to be felt, a pulse has first to be found, and in addition to there being no piece assigned to gerdaniye we also fail to encounter any exemplification, however brief, among the wide selection of modes in 296, where it is conspicuous by its absence. The search is further complicated by the occasional lack of fit between Cantemir's descriptions of modal structure and the evidence of the notations: it is in consequence impossible to prove, without other evidence, that the various passages in the corpus which correspond to the profile of gerdaniye that he gives, in any case a rather general one, do in fact represent it, so that the identification that has been suggested on behalf of 182 H2b (in the course of the discussion of 47. ru-ye ırak) would have to be regarded as no stronger than a reasonable inference.

Fortunately, help is provided by ʻAlī Ufḳī, for despite having no gerdaniye section, he does qualify one vocal piece in his rast section as in gerdaniye.[355] This is a *murabbaʻ* where the setting of the quatrain is of the standard A A B A pattern. A is confined to the lower register, but for all that is not readily to be identified with rast, for although it has initial *G* the finalis is *A*: seen in isolation it might best be classified as in 55. uşşak. But the contrastive higher-register B corresponds exactly to Cantemir's definition of gerdaniye, beginning on *g* and descending to finalis *A*.

The text for B is:

> *dalub deryā-i ʻışḳa gevher-i maḳṣūda eriştim*
> I plunged into the sea of love and reached the longed-for pearl

and the setting (transcribed with ♩ for ʻAlī Ufḳī's 𝅗𝅥) consists fairly clearly of 3 cycles of 3+4+4 time units (a structure which, intriguingly, the theoretical literature fails to record), as follows:[356]



Example 76

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[352] The same theme emerges in the course of the extensive discussion of 54. dügâh where, having mentioned (p. 28) that eviç (with prominent *f♯*) cadences on its lower octave note (*F♯*), he notes that gerdaniye does not follow suit, cadencing not on *G* but on *A* (dügâh), the reason given being exactly that adduced here.

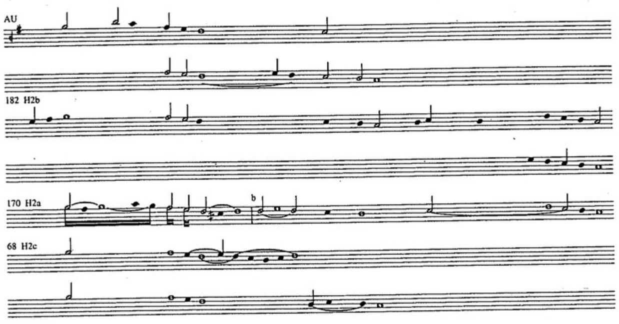
[353] بو مقامك حكمى هيچ يوقدر ددكمه حال ايله سائر مقاملره دوقنمز تركب بولنه انكيچون اوزرينده بر تصنيف اولنمش نسنه يوقدر .

[354] Confirmatory evidence is supplied by the hardly fortuitous juxtaposition of all three pairs in ʻAlī Ufḳī's collection.

[355] 115b/224.

[356] It is conceivably a derivation from devr-i kebir by the addition, in metrical terms, of a foot to a half cycle (3+4→3+4+4), and comparisons could be drawn with 348, where the existence of such a half cycle is hypothesized. But a perhaps more mundane (if no less far-fetched) explanation can also be considered: that just as in the case of 347, if with rather different results, ʻAlī Ufḳī is here producing a garbled version of evsat, albeit with rather more severe truncation of the second half of the cycle.

Taking this as confirmation of the accuracy of Cantemir's account, we may with rather greater confidence regard 182 H2b as a likely example, and to this can be added 170 H2 (omitting only the final note, which is passing rather than cadential) and, among the pieces in 57. neva, to the modulatory family of which of gerdaniye belongs, 68 H2c.[357] Assuming that time units 4 and 8 represent the internally prominent nodes in ʻAlī Ufḳī's *murabbaʻ* we thus have in all:



Example 77

The general similarities here are such that further comment is hardly required except, perhaps, in relation to the internal structure of the *g* - *A* span, which one would expect to be split into two tetrachords, with *d* therefore pivotal and, consequently, prominent. This expectation is fulfilled in a way not apparent from ex. 77 both in the ʻAlī Ufḳī composition and in 68 H2c, that is by assigning a cadential role to *d*. Not so, however, in 182, where *e* and *c* are accorded some degree of prominence and *d* none.

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[357] Another, if weaker, possibility is 59 H2b. Further, although gerdaniye does not appear in 296, there is one subsection in the other külliyat pieces, 23 H2d, that bears a general resemblance to 59 H2b and conforms sufficiently closely to Cantemir's description to warrant the suspicion that it might also represent it, even if the initial emphasis is more on *f♯* than *g*. Lastly, on the basis of the relationship posited above by Cantemir between gerdaniye and baba tahir—even if no mention of it is made in his description of the latter—we may consider as at least a possible area of overlap 157 H1b and Ma. Feldman (op. cit., pp. 401-2) also refers to gerdaniye in relation to 283 H1a and b, and the former is certainly very similar to the material selected here. But as the piece is assigned to arazbar, one of the modes that overlaps with gerdaniye, it seems appropriate to consider it there.

51. muhayyer

The following pieces are in this mode:

21, 36-8, 75, 81, 91, 199, 223, 235, 285, 341

and it is also exemplified in 296.

This is the last of the set of high-note makams, and with twelve compositions as against the nine in eviç is the best represented of the three. Cantemir opens his account (p. 34) by defining the eponymous note as the upper octave of *A*, and he then states that it begins by ascending from *e*; that its defining nucleus consists of three notes; but that it requires for completion a descent on main notes to finalis *A*. The following expansion mentions the possibility of ascending from *a* to *e'* and descending to *E*, after which there is a return to finalis *A*. Cantemir then adds that although muhayyer is an important makam,[358] it could, if one wished, be regarded as a transposed form of 57. neva because the outline $A \rightarrow d \rightarrow E$ is pure (*ṣāfī*) neva. This appears a little odd, as it does not correspond exactly to the $e \rightarrow a \rightarrow A$ outline of muhayyer.[359] However, it does provide the stimulus for him to mention another distinguishing feature of muhayyer, a tendency in descent to emphasize *e* and then normally omit *d*, jumping to *c* and touching on *d♭* in the cadential approach to *A*—useful information, even if he fails to mention that this is not a characteristic of muhayyer only, being also encountered in 8. kuçek and 25. saba.

As usual, the initial exposition may be taken to comprise, normally, all the material down to the first cadence on *A*, even though this occurs at the end of H1 only in 21, 75, 235, 285 and 341. In the remainder H1 has *a* or *e* as finalis (and sometimes, in different subsections, first *a* and then *e*), so that part or all of M has also had to be included in ex. 78.[360]

Rather unexpectedly, the one piece to fulfil Cantemir's initial *e* prescription is thus 285, his own composition: the normal strategy was evidently to begin from *g* or *a*. But from *e* 285 immediately jumps to *a*, which is the first main focal point in the majority of pieces, even if not necessarily much elaborated. There is then frequently a descent to *e* or *d*, an ascent or jump to *c'* (or, sometimes, *d'*), and then a descent (sometimes with an intermediate ascent to *a*) to finalis *A*, normally elaborated. That a reasonably comprehensive summary can be couched with such brevity points to a high level of consistency in the corpus, and this makes the contrasting profile exhibited by 235 and 38 all the more striking. The former begins with *a*, but then, in comparison with the norms established by the majority of muhayyer pieces, opts for a radical reordering of material: it proceeds directly to the saba-like element noted by Cantemir as a feature of the descent immediately prior to reaching finalis *A*, and dispenses

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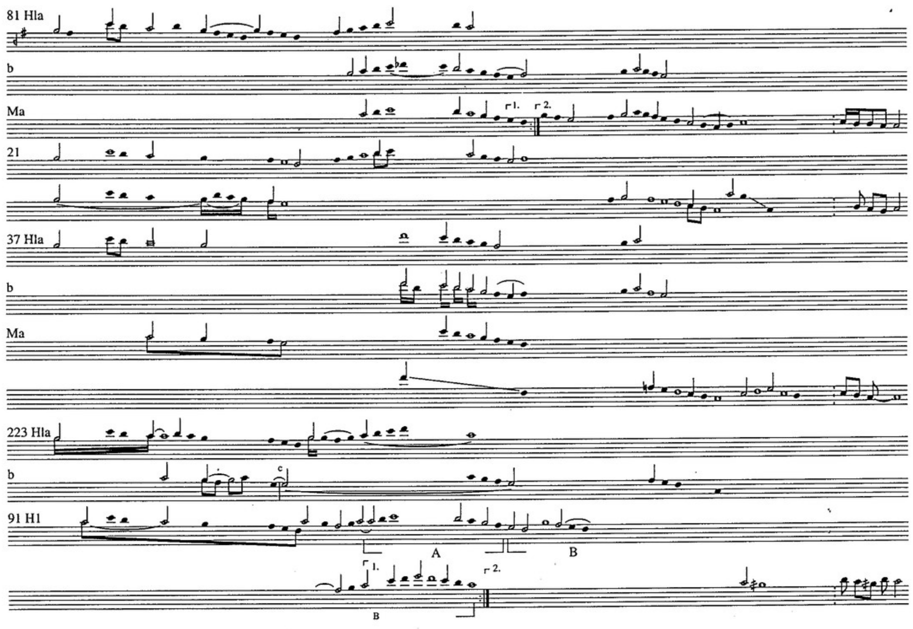
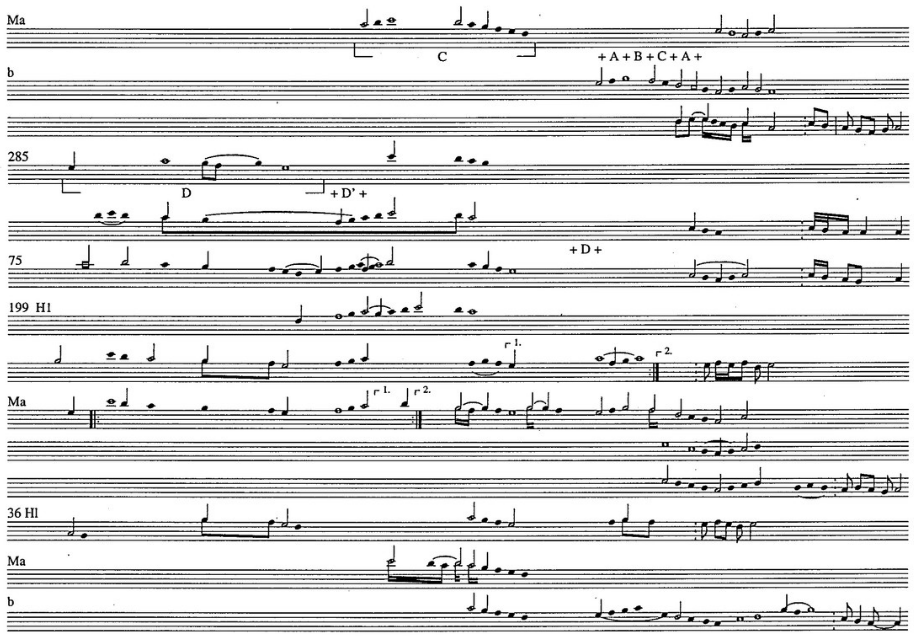
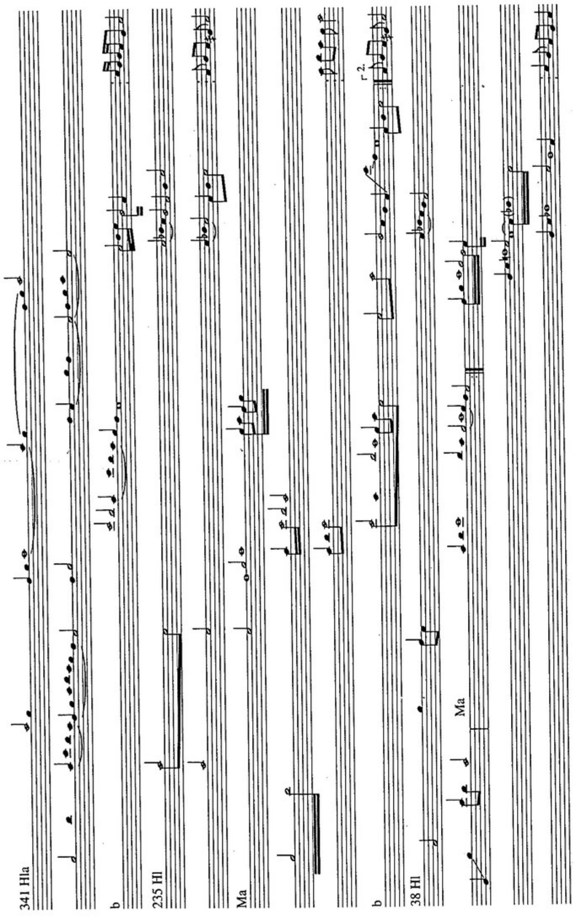
[358] He gives here one of his rare characterizations, calling it 'great and highly esteemed/powerful' (*ulu ve ʻazīz*).

[359] It is just conceivable, even if unlikely, that the discrepancy could derive simply from an unwillingness to include a finalis *D*, both because it occurs in only one mode (acem yegâhi) and because Cantemir elsewhere (p. 27) implies that this note is somehow marginal.

[360] In 223 only Ma is given despite the fact that the cadence proper occurs in Mc, the reason being that Mb modulates while Mc is atypical in its concentration on the *d* - *A* tetrachord. In 235 the melodic layout suggests that it would be appropriate to include M despite the cadence on *A* in H1. For reasons of space, the representation of Mb omits the prima volta ending, a rising scale from *A* to *a* linking low and high registers. Of the repeated material in 37 Ma and at the end of 199 Ma only the seconda volta version is given.


81 Hla
b
Ma
r 1.
r 2.
21
37 Hla
b
Ma
223 Hla
b
c
91 Hl
A
B
r 1.
r 2.
B


Ma
C
+ A + B + C + A +
b
285
D
+ D' +
+ D +
75
199 Hl
r 1.
r 2.
Ma
r 1.
r 2.
36 Hl
Ma
b



Example 78

with any attempt to develop the evidently characteristic high register, relegating this to M. The latter[361] presents a similarly radical reordering or, more precisely, reversal of elements: after a 58. hüseyni-like opening gesture, essentially *A g f♯ e* (also encountered initially, it may be observed, in 36 H1),[362] it immediately jumps, kuçek-like, to *c*, and proceeds forthwith to the cadential formula with *d♭*. A following ascent then leads to the standard initial *g c′ b𝄳 a* contour which, however, here terminates H1, the subsequent development of the high register, also marked by dramatic compression, again following in Ma. The fact that the two pieces that appear the most unconventional in the patterning of the exposition are also the only two to include *d♭* may not be a chance correlation: they may represent a stage of development, or experimentation, contemporary with Cantemir, thus explaining his reference to *d♭* despite its absence from his own composition in muhayyer.[363]

38 Ma concludes with repeated saba-like phrases including *d♭*, allied again to the omission in descent of *d* which Cantemir indicates, quite correctly, as a characteristic. Indeed, the *e* - *c* jump appears in no fewer than eight pieces.[364] Also evidently justified is his comment about the need for a descent from the initial high register to finalis *A*, but what is not quite clear about the high register is the identity of the defining nucleus of three notes to which he refers: from the context one might conclude that it consisted of *f♯*, *g* and *a*, but on the basis of the corpus *a*, *b𝄳* and *c′* would appear to be stronger candidates. In the lower register, on the other hand, it is quite clear, despite one cadence that ascends from *F♯*, that there is no evidence of the possible further descent to *E* to which he alludes. Nevertheless, where the first main cadence on *A* occurs before the end of M one might expect in what remains of the exposition, before H2 reverts yet again to the upper register, some greater emphasis on the lower, that is, on the *A* - *e* pentachord as contrasted with the *e* - *a* tetrachord and notes above. The expectation is only partially fulfilled, for in addition to the subsections marked by lower-register emphasis[365] there are others in which there is a balance between the two, while yet others give primacy to the *e* - *a* tetrachord, sometimes, indeed, recalling material from H1.

In the main, H2 reworks and varies the high-register material of the exposition. The initial *g c′ b𝄳 a* figure often recurs, and there tends to be a more sustained elaboration of the area around *a*, with the *a* - *c′* trichord or the *a* - *d′* tetrachord assuming greater importance than hitherto. Also frequent is a cadence on *a*, usually taking the form *a g f♯ g a*. The pieces that do not conform to this general pattern, or conform only partially, are 91, 285 and 341. In 341 H2 is completely sequential, consisting of a *G* → *a* ascent followed by a *c′* → *A* descent, fuller development of the upper register being deferred until H3, while in 285 there is greater emphasis on the *e* - *a* tetrachord in H2a and b (with *e* the finalis in a), the higher register coming more to the fore in H2c. In 91 H3, as in 341, we encounter, reversing the normal order, high-register material conforming to the dominant pattern in H2 elsewhere, while H2 provides a contrastive modulation into the domain of 27. buselik, possibly to be identified specifically as 60. hüseyni-buselik.

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[361] It has the title yürük dügâh, suggesting the presence of elements of, or a degree of overlap with, 54. dügâh, in relation to which it will be considered further.

[362] 58. hüseyni is also invoked by ʿAlī Ufḳī as the mode of 81, but given both its initial high register and its clear typological resemblance to 37 and 223, both of which he assigns to muhayyer, it is difficult to see why he should have done so.

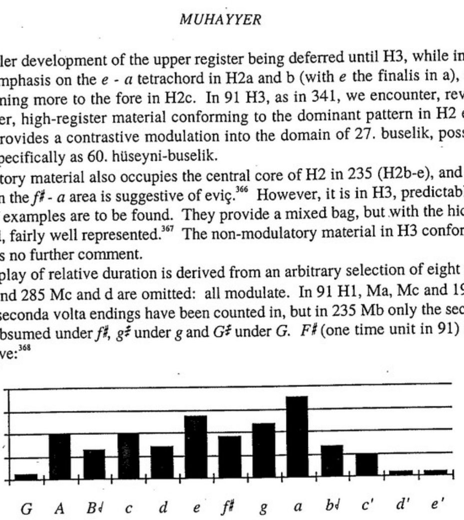
[363] No conclusions can be drawn from the fact that it is also absent from the sample of muhayyer in 296, in which more recent forms are usually represented: despite being of twice the normal length this consists entirely of high-register material, so that there is no descent to finalis *A*.

[364] 37, 75, 199, 223 (in Mb), 235, 285 and 341 (and in 36 Mc in the form *e B𝄳 c*).

[365] Not all of which, however, remain in muhayyer, 285 Mc in 26. beyati being the most obvious modulation.

Modulatory material also occupies the central core of H2 in 235 (H2b-e), and in 223 the emphasis on the *f*♯ - *a* area is suggestive of eviç.[366] However, it is in H3, predictably, that the majority of examples are to be found. They provide a mixed bag, but with the hicaz family, as expected, fairly well represented.[367] The non-modulatory material in H3 conforms to type and requires no further comment.

The display of relative duration is derived from an arbitrary selection of eight pieces. 38 Mb and c and 285 Mc and d are omitted: all modulate. In 91 H1, Ma, Mc and 199 H1 both prima and seconda volta endings have been counted in, but in 235 Mb only the seconda volta one. *f* is subsumed under *f*♯, *g*𝄲 under *g* and *G*𝄲 under *G*. *F*♯ (one time unit in 91) is omitted. We thus have:[368]



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[366] Even if the same emphasis appears in the first cycle of the exemplification of muhayyer in 296.

[367] It appears in 21, 199, 223 and 235, usually in the guise of hicaz itself alternating, because of the high-register emphasis, with şehnaz. In 199 there is also an episode in saba. 75 opts for acem. Less clear is 81 H3a, where the range is *f*♯ - *c'*, *b*𝄳 is prominent and *b*♭ occurs in the descent to finalis *f*♯. 223 H3b again hints at eviç, while in 285, after an initial *G* - *c* leap, *c* and *e* are prominent, suggesting hüseyni. There are also occasional modulations in M: the saba-like ending of 38 Ma triggers a clear shift into saba in Mb, the range of which is *A* - *d*♭, followed by kuçek/saba in Mc (reminiscent of the beginning of 93 H1), while 285 Mc is in beyati and Md, which returns to the *A* - *e* pentachord, could readily be classified as in hüseyni. 235 H2b-e is a particularly strange area: each subsection is modally different, but none is easy to identify. H2b introduces *b* but also includes *b*𝄳, c consists of *a* - *d'* fourths except for one instance of *g*𝄲 that points away from muhayyer, d is pentatonic, while e might be relatable to eviç, even if initially it has *f*𝄲 rather than *f*♯.

[368] The breakdown for the individual pieces is as follows:

	G	*A*	*B*𝄳	*c*	*d*	*e*	*f*♯	*g*	*a*	*b*𝄳	*c'*	*d'*	*e'*
21	2	27	12.5	13.5	18	28.5	17.5	23.5	23.5	6	5	0	0
36	1	14	8.5	9	12	23.5	13.5	13	11.5	4	2	0	0
38	3	11	6	12.5	8	15.5	15	13	14	8	6	0	0
75	3	24	15	35	14	26	18	16	21	8	4	0	0
91	4	16	11	15	17	33	25	40	77	34.5	24.5	10	12
199	3	25	25.5	37.5	30	37.5	33	38.5	34	9	7	0	0
235	3	28	18	29	9	29	8	23	58	21	14	0	0
285	0	11	1.5	3.5	2.5	19	11.5	17	33	14	12.75	2.25	0
	19	156	98	155	110.5	212	141.5	184	272	104.5	75.25	12.25	12

The basic *a* - *e* - *A* structure is thus clearly shown in the pattern of salience, although *g* is hardly less salient than *e*, and slightly more so than *A*, thus reflecting the difference in the relative importance of the two segments: the upper tetrachord accounts for 52% of the whole, the lower pentachord for 47% (with a shared almost 14% for *e*). In the lower pentachord one may note an emphasis on the *A* - *c* - *e* triad, the weakness of *d* reflecting the tendency to omit it in descent.

With muhayyer we reach the end of Cantemir's set of three high-register main-note makams. But before reverting to the lower-register set and continuing with 54. dügâh, it would be appropriate to complete the survey of high-register modes by considering arazbar and baba tahir, two modes for which, if in ways not always easy to interpret, both the notated examples and the verbal descriptions point to links not only with 51. muhayyer but also with the more elusive 50. gerdaniye.

52. arazbar

The following pieces are in this mode:

49, 61, 283

and it is also exemplified in 296.

According to Cantemir, as noted above, 50. gerdaniye, arazbar and 53. baba tahir are difficult to tell apart, even though he supplies what appears to be a neat contrast between arazbar and baba tahir couched in terms of their similarities with other modes, the former being akin to beyati, the latter to gerdaniye. But this symmetrical reduction, however attractive, is in fact a misrepresentation, for the second statement is couched in comparative terms: baba tahir, he says, is closer to gerdaniye, thus implying a degree of proximity, even if lesser, for arazbar too, and when we turn to his account of arazbar (p. 54) we find references to both 26. beyati and gerdaniye: arazbar, he says, begins on *g*, then descends like gerdaniye; it touches *f* and *e*♭, dwells on *B*𝄳, descends to *A* and *G* and then returns and proceeds like beyati, with finalis *A*.[369]

In the context of Cantemir's normal technique of modal description this is a quite precise account. It suggests that arazbar was to some extent a compound of gerdaniye and beyati, but added a further characteristic in its lower register and at the same time possessed a degree of individuality with regards to the sequencing of its constituent elements that should have been sufficient to obviate problems of identification. However, when we turn to the notations we find that Cantemir's arazbar corpus, despite consisting of only three pieces, does not appear particularly cohesive, and reference to ‘Alī Ufḳī only serves to increase confusion. As he has no arazbar section another mode label is unavoidable, but as he also has no gerdaniye section one might expect it to be beyati. But the fact that it is not is less disconcerting than to find that the two of Cantemir's three arazbar pieces represented in ‘Alī Ufḳī's collection are

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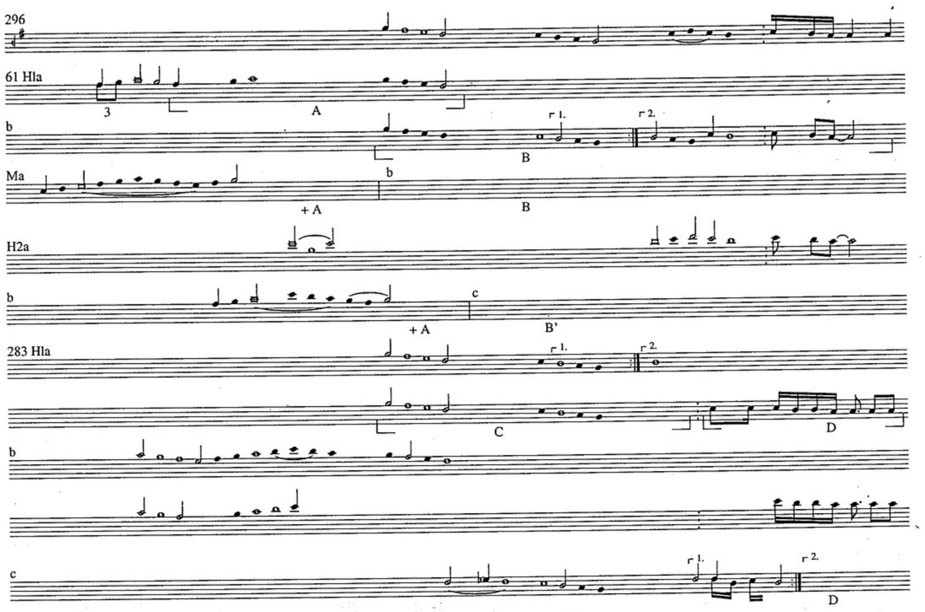
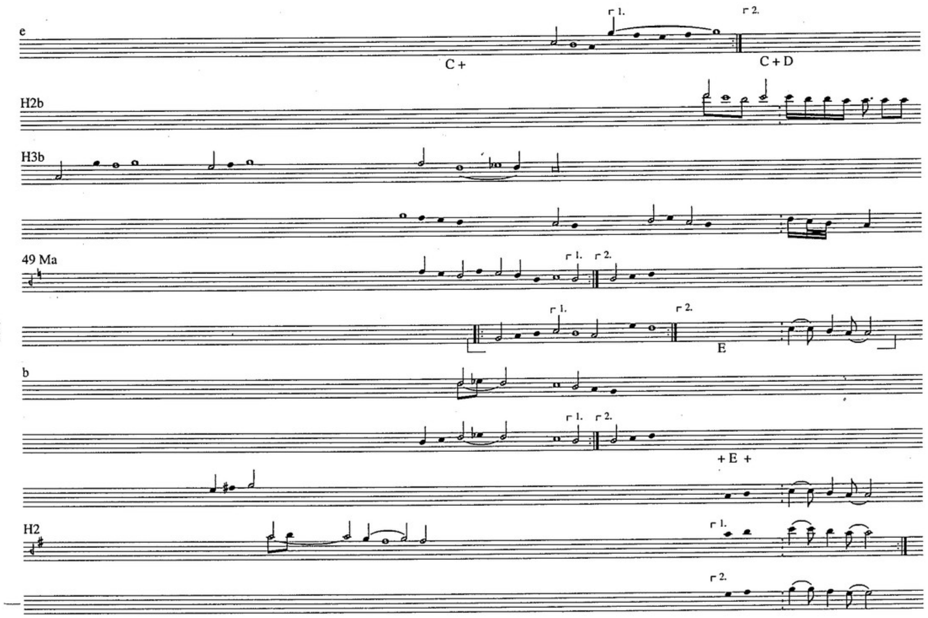
[369] عرضبار حرکت اغازه سنی کردانیه پرده سنده شروع ایدر اندن کردانیه یوزیندن اشاغه اینوب عجم وبیاتی پرده لری اوخشایارق کچر سکاه پرده سنده بر آز مکس ایدوب دوکاهه وراسته اینر آندن کنه عودت ایدوب بیاتی شکلنده دوکاه پرده سنده قرار قلر .


296
61 Hla
3
A
b
r 1.
r 2.
B
Ma
+ A
b
B
H2a
b
+ A
c
B'
283 Hla
r 1.
r 2.
C
D
b
c
r 1.
r 2.
D


e
r 1.
r 2.
C +
C + D
H2b
H3b
49 Ma
r 1.
r 2.
r 1.
r 2.
E
b
r 1.
r 2.
+ E +
H2
r 1.
r 2.

Example 79

not even, according to him, in the same mode: 61 he assigns, rather unexpectedly, to 58. hüseyni,[370] and 49, less controversially, to 35. acem. However, it is relevant to add that he does recognize a certain connexion between beyati and arazbar or, more precisely, the adjectival form arazbari, for he uses this to qualify a piece in beyati,[371] presumably indicating thereby a particular attribute or variant, albeit not one sufficiently distinctive to require a totally separate modal identification. But what that attribute or variant might be is not immediately clear, at least not from the exposition (H1 and M) which, considered from the perspective of beyati, evinces nothing untoward.[372] For 49 H1, on the other hand, which has initial *A* and prominent and finalis *f*, the appropriateness of the acem label seems incontestible. But Ma soon begins to diverge from its normal lines of development, first 'dwelling on *B*𝄳', a feature which may occur in acem, as in 269, but is not (cf. ex. 56) generally characteristic, and then sheering away by emphasizing *G*, as if modulating to 55. uşşak. This is followed in Mb by an explicit shift to beyati with the inclusion of *e*♭.

The survey given above in ex. 79 therefore discards 49 H1, but includes 49 M. It also integrates the presentation of the high-register passages in H2, which typically have an upper-octave cadence on *a*, with that of the remaining material. H3 is generally omitted, but an exception is made for 283 H3b.[373] 283 H1d and H2a, the latter essentially a transposition of the former, may be identified as modulatory, and have likewise be omitted.

Some of the features Cantemir describes are illustrated in the brief sample in 296. Its initial descent from *g* through prominent *d* to *G* (although not the prominence of the latter) accords with the evidence for gerdaniye adduced in ex. 77, while despite the absence of *f* and *e*♭ the final descending exposition of the *d* - *A* tetrachord likewise supports the notion of a connexion with beyati. In any event, irrespective of what it might omit, the characteristic nature of its material is demonstrated by the clear parallels furnished by 61 H1b and 283 H1a. Of the other elements he mentions *f* appears only in the initial and still presumably acem-like area of 49, but *e*♭, the incontrovertible signal of a shift to beyati, occurs in both 49 and 283 (where it also reappears in H3).

Cantemir suggests as a further characteristic a prominent *B*𝄳 followed by a descent to *A* and *G* before a final beyati-like passage and, broadly speaking, all three pieces bear this out. But if we thus find that in the main his prescriptions are followed, it is also the case that we

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[370] Given the initial ascent from *f*♯ to prominent *a* 51. muhayyer would seem a more likely candidate. But as he also assigns another initially high-register piece (which for Cantemir is in muhayyer) to hüseyni (see n. 362), perhaps one should not be too surprised.

[371] 54 in Cantemir's collection (but to add further to the confusion, for Cantemir this piece is not in beyati but in neva). Also relevant here is to note that in his beyati index (p.117) Cantemir lists among the *nā-mevcūd* pieces one which has the title (or qualification) arazbar.

[372] It follows a standard *d* → *A* trajectory. *B*𝄳 is fairly prominent, especially in H1 1 and 2, but the most striking feature is the cadential use of the formula *A F*♯ *G A* (which is more commonly initial). In the present context, however, this is irrelevant, and there is nothing to correspond to the descent from *g* which appears in both 61 and 283 (the highest pitch is in fact *e*). Likewise, no particular significance attaches to the near-identity of the first half of M 1 and 61 Ma 1 (which can in any case be matched by the near identity of the first half of H1 3 and the first half of 158 Mc 1, in baba tahir ...).

[373] The remaining material is either modulatory (49 H3a, 61 H3, 283 H3a) or a repetition of earlier material (49 H3b).

encounter one evidently important feature he fails to note, the extensive high-register block of material contained within the initial exposition in H1 in both 61 and 283, at the core of which is a wave-form oscillation between *f*♯ and *a* (with which may be compared the briefer high-register passage in 49 H2). This, to anticipate, fits his description of the beginning of baba tahir, and to the extent that it may represent an area of overlap helps to explain the difficulties in discriminating between these two modes (and gerdaniye) previously alluded to, especially as it also points beyond baba tahir to links with muhayyer.

If we regard the *B*𝄳 *A* *G* element as specific to arazbar but label the other features by modal affiliation we obtain the following distribution:

A.	arazbar	49 Mb	61 H1b, Mb, H2c	283 H1a, c, e	(296)
	gerdaniye		61 H1b, Mb, H2c	283 H1a, e	296
	beyati	49 Mb		283 H1c, H3b	296
B.	baba tahir	(49 H2)	61 H1a, Ma, H2b	283 H1b	
	acem	49 H1			

This may help explain why ‘Alī Ufḳī chose different modal designations for 49 and 61: both pieces omit one of the elements in the A set, which for Cantemir are constitutive of arazbar (and, significantly, co-occur in 296).[374] But although 49 and 61 have very little in common in H1 and M, H2 does offers some degree of convergence, even if it is not without significance that 49 H2 cadences on *e* and 61 H2b on *d*. However, there is no echo of this material in 283 H2.[375]

The following display of relative duration omits the modulatory 49 H1 and 283 H1d, but otherwise covers H1 and M. *e*♭, given the reference to beyati, is accorded a separate entry, but *f* (4 time units in 49) is subsumed under *f*♯. *d'* (one time unit in 283) is omitted, so that we have:[376]

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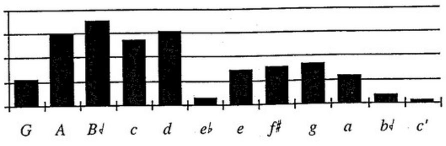
[374] As noted above, the conjunction of gerdaniye and beyati elements is also absent from the initial exposition of the piece which ‘Alī Ufḳī does characterize as arazbari; but the gerdaniye element may be identified in H2. Absent again from this piece is the *B*𝄳 *A* *G* descent, regarded here as an element not shared with the other modes that overlap with it, so that it must be some other feature that triggered his use of the label. One may further remark (cf. n 142) on the lack of any obvious resemblance to beyati in 61 (apart, possibly, from the surely too late H3), which makes the identification of the almost identical 330 as in beyati all the stranger.

[375] 283 H2b has some faint similarity with 61 H2a, both descending to finalis *a*, but H2a is a slightly varied transposition to the upper octave of H1d, in any case identifiable as a modulation into 45. segah/46. maye. The same modulation, although possibly beginning from 24. pençgâh, appears in 61 H3, while in 283 H3a we encounter 58. hüseyni and in 49 H3a a less easily identified mode: the pitch set is that of 27. buselik, but *c* is initial, medially prominent, and finalis.

[376] The breakdown for the individual pieces is as follows:

	G	*A*	*B*𝄳	*c*	*d*	*e*♭	*e*	*f*♯	*g*	*a*	*b*𝄳	*c'*
61	3.5	15.5	18.5	11.5	14.5	0	12.5	13.5	17.5	10.5	2.5	0
283	6	32	36	29	26	2	15.5	21	23.5	21	7	4
49	18	28	37	31	40	6	9	5	2	0	0	0
296	2	5	3	2	2.5	0	2	2	1.5	0	0	0
	29.5	80.5	94.5	73.5	83	8	39	41.5	44.5	31.5	9.5	4



We thus appear to have two clearly differentiated zones, the *A* - *d* tetrachord, accounting for 61% of the whole, within which *B*𝄳 is salient, if only narrowly; and the *e* - *a* tetrachord, accounting for 29% of the whole. However, the various disparities between the three pieces remarked on above mean that the usefulness of these figures is limited in the extreme: it will be seen, for example, that the difference between the two zones exaggerates only slightly the values exhibited in 283, but is at the same time a mean between a complete absence of contrast in 61 and a much more extreme contrast in 49.

53. baba tahir

The following pieces are in this mode:

157, 158, 340

and it is also exemplified in 296.

Of this parallel group of three pieces, 158 has no mode heading, while that for 340 is just tahir. However, 158 forms a pair with 157, of which it is the *naẓīre*, and in any case the index (p. 124) confirms their common identity by including all three within the baba tahir entry. As with 52. arazbar, there is no section for baba tahir in ʿAlī Ufḳī's collection, so that the one piece he includes, 158, must be assigned to another makam. His preference is for 51. muhayyer, which in this case is actually one of the two options implied by Cantemir's description.

This begins (p. 54), after the normal heading, with what is, in the present context of unclear boundaries and variant designations, an interesting slip of the pen, the name arazbar being substituted. But it thereafter proceeds in a straightforward manner, informing us that baba tahir begins on *a*, and is initially identical with muhayyer; it then descends like 26. beyati to *d*, on which it dwells, thereby making beyati manifest, and then descends via *c* and *B*𝄳 to finalis *A*.[377] Nowhere else among the various comments on the difficult-to-disentangle group of 50. gerdaniye, arazbar and baba tahir is muhayyer invoked, and a further layer of confusion results from the fact that the injection of this unsuspected new element is matched by the omission of any reference to gerdaniye, to which, it may be recalled, baba tahir had previously been declared closer than arazbar. Thus Cantemir's descriptions suggest that the two can be summarized *grosso modo* as:

baba tahir = muhayyer + beyati
arazbar = gerdaniye + beyati

whereas his remarks on gerdaniye suggest that there is greater justification for associating it with baba tahir than with arazbar. Although it can hardly be said that the evidence of the notations bears out this contention, a case can certainly be made for a greater degree of overlap between baba tahir and arazbar than is suggested by the $x + z$ versus $y + z$ reductions (and hence for a higher degree of confusion as to identity). In the arazbar pieces the presence has been noted of initial baba tahir-like (and hence, presumably, muhayyir-related) material, so that the reduction could justifiably be expanded to muhayyer + gerdaniye + beyati, while a case of sorts could also be made for the addition of gerdaniye to the basic baba tahir ingredients, thereby leading to an identical formulation. Thus the initial muhayyer-related material of baba tahir is frequently followed by a descent to *d* in which *g* normally occupies a prominent node, and although the reference to beyati ties in with the shift of emphasis to *d* (as contrasted with the prominence of *e* in muhayyer proper), it would still be more realistic to describe this as akin to gerdaniye, for beyati does not generally contain a descent from the upper register in the exposition (cf. ex. 43) and in any case normally has *f*, not *f*♯.

It is just possible that 340 can shed some light on this apparent inconsistency. A fragment attributed to Angeli, and almost certainly late, it descends initially to *d* via *f*♯, but then immediately introduces, and stresses, *f*, which fits well with a shift to beyati, and it is therefore just possible that rather than refer to gerdaniye in relation to a minor inflection of a descent that would occur anyway within a continuation of muhayyer-related material, Cantemir chose to allude to a recent development in which the following beyati component had begun to generate a preference for *f*.

With minor reservations, all three baba tahir pieces are quite similar to each other, so that there are none of the radical differences encountered in arazbar. However, not too much should be made of this contrast: 158 is, after all, a *naẓīre* of 157, so that close kinship is only to be expected, while 340, even within the brief compass of H1 and part of M, which is all that survives, manages to vary the initial pitch-set and exhibit other differences of approach also. These can be seen in the survey in ex. 80, which excludes only the modulations in H3 of 157 and 158 and in 158 H2c. One of the borrowings from 157 that 158 makes is H1b 1, which is, with only minor variations, a transposition one step down of H1a 1, and it has, accordingly, been placed directly beneath. For reasons of space the *f*♯ - *a* oscillations of the muhayyer-related element have been displayed horizontally.

The sample provided by 296, with which the three pieces are in broad agreement, suggests a basic *f*♯ → *a* → *f*♯ → *d* → *A* outline, *d* being the centre of an area of elaboration. This accords tolerably well with Cantemir's description, although when the elaboration rises through *f*♯ to *g* it can hardly be said to be typical of beyati. But the use of *d* as a (sub)section finalis in 157 H1a and b confirms its pivotal role between two segments, so that the opening elaboration in Ma, which includes the *d g f*♯ *e d* formula, may still be regarded as transitional, and what follows is readily classifiable as in beyati (although in the absence of *e*♭, which appears nowhere in these three pieces, this is not necessarily the only possible analysis). 157

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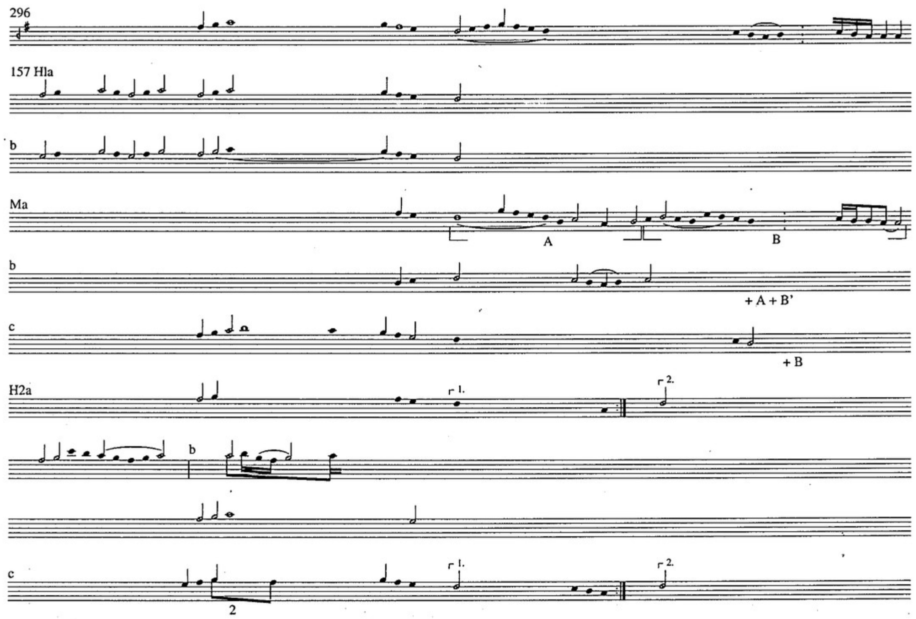
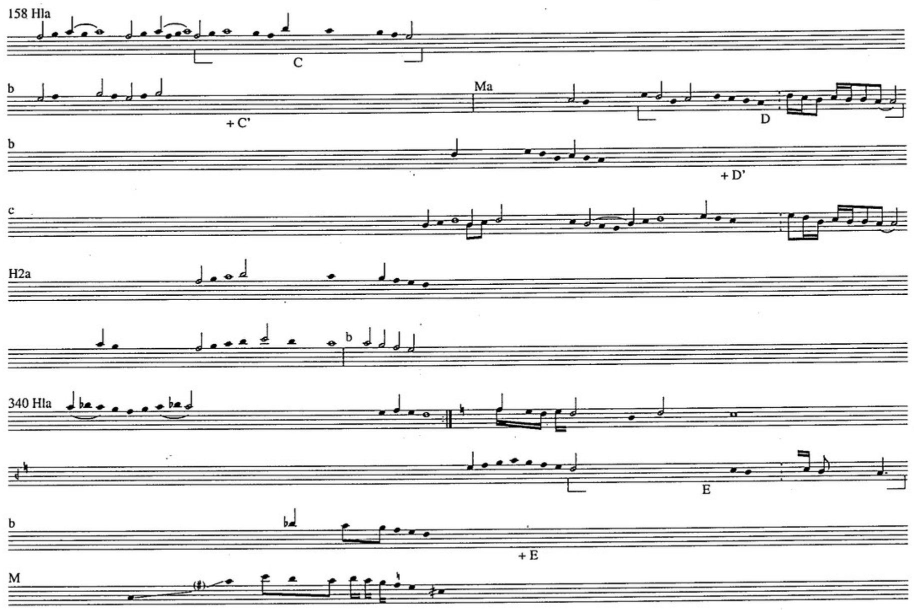
[377] تشرح بابا طاهر عرضبار حرکت اغازه سنی مخیّر پرده سنده شروع ایدر وتمام مخیّر نغمه سنی کوستردیکدنصکره بیاتی یوزیندن نوا پرده سنه کلور نوانك اوزرینده بر آز مکس ایدوب تمام بیاتی مقامنی کوسترر آندن چارکاه وسکاه اینوب دوکاهده قرار قلر .


296
157 Hla
b
Ma
A
B
b
+ A + B'
c
+ B
H2a
1.
2.
b
c
1.
2
2.


158 Hla
C
b
+ C'
Ma
D
b
+ D'
c
H2a
b
340 Hla
E
b
+ E
M

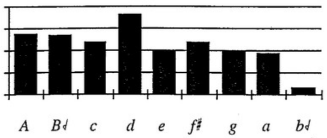
Example 80

Mb continues to develop the beyati component, after which the concluding Mc can be viewed as a brief reprise of both elements. Such a reprise is lacking in 158, but it is otherwise identical in the patterning of its modal exposition, H1 being devoted to the muhayyer-related material, M to the beyati segment. Both subsections of H1 cadence not on *d*, as in 157, but on *e*, which has the effect of delaying the transition to beyati and could be interpreted as emphasizing kinship with muhayyer, not only because it frequently functions there too as a section finalis but also because the resulting *e* - *c* jump (between H1b and Ma) is one of its characteristics. 340 H1 is similar in expository structure to H1 in the other pieces, even if beginning with an *a b♭ a* flexure foreign to muhayyer and reminiscent, rather, of 21. sünbüle. This potential association is, however, denied by the repeated *a* → *f♯* → *a* → *f♯* → *d* trajectory of 1, and although the two following cycles are suggestive of 35. acem they are also interpretable in terms of an extended elaboration of *d* within the context of beyati. H1b functions like 157 Mc, as a summarizing reprise, although condensed to the point of omitting *f♯* in favour of the descent through *f* to *d*, so that there is this time a rather stronger hint of parallels with the upper register in some beyati pieces (see ex. 45).

In both 157 and 158 muhayyer-related material also predominates in H2 (although it was doubtless the high register of H1 that was instrumental in ʻAlī Ufḳī's choice of muhayyer for 158). This is only to be expected, not only because there is normally a concentration on the higher register in H2, but also because it will be followed by M, which in each case emphasizes the lower-register beyati element.[378]

What is involved is, nevertheless, register and pitch set rather than melodic trajectory, and it should be said that the phrase 'muhayyer-related' has been used above out of deference to Cantemir's definition rather than out of any conviction as to its fundamental accuracy. His reference to muhayyer in relation to baba tahir goes against the grain of his previous remarks, and it is not inconceivable that it was co-opted as the next-best substitute for gerdaniye precisely in order to avoid duplicating the $y + z$ formulation he had just given for arazbar. It is true that there is an obvious overlap in register between the initial exposition of muhayyer and that of baba tahir (the left-hand half of ex. 80), but here the notations point to a basic initial *f♯* → *a* → *f♯* → *d* outline, suggestive of an overlap with a segment of 44. eviç rather than with muhayyer, for which the comparable outline is *g* → *a* → *c′* → *a* → *e*. Also to be noted is what may be interpreted as a shift towards gerdaniye effected by the transposition of 157 H1a 1 down a tone in H1b (replicated in 158 H1b). It is impossible to say whether this is any more than a random quirk of one piece simply copied by the other and of no particular importance for the structure of baba tahir as a whole, but it does reinforce a modal relationship about which Cantemir had previously been insistent.[379]

In the following display of relative duration *f* is subsumed under *f♯* and *b♭* under *b𝄳*. *G* (half a time unit in 158) is omitted, so that we have:[380]



Apart from showing clearly the salience of *d*, this profile underlines the difference between the upper register material and muhayyer, for the relative importance of *f♯* (weak) and *e* (strong) in muhayyer is here reversed. It also contrasts markedly with that for arazbar, showing a much more even balance between registers.

2.2.12 *The uşşak group*

We may now revert to the low-register main-note makams, picking up Cantemir's ascending sequence, which began with ırak with finalis *F♯* followed by rast with finalis *G*, so that we now arrive at modes with finalis *A*, represented, at least initially, by dügâh. As this is followed by segâh, associated with *B𝄳*, and çargâh, associated with *c*, which have already been considered, what still remains of the series to be examined consists of neva and hüseyni, the two main-note makams associated with *d* and *e* respectively, but again normally with finalis *A*, so that they could be grouped together with dügâh. But rather than begin with one of these, we may resume where we left off, with the mode that Cantemir presents after rast, the one particularly associated with the note *A*, and at the same time the most elusive and awkward of the series, that is (or, as we shall later find, is not), dügâh.

54. dügâh

In fact, Cantemir presents dügâh as a kind of Cheshire cat, sharing its name with (or taking the name of) this most important of notes, but then vanishing behind the mysterious smile of a piece he assigns to a mode whose existence he denies.

He begins his extremely lengthy and complex account (pp. 25-9) by referring to the disagreements among musicians concerning the nature of dügâh and their failure to explain their views clearly: some assert that there is no such makam, while others claim, in a formulation reminiscent of his own categorization of rehavi, that it is a *şo'be* ('branch', an ancient term

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[378] In 340 H2 is missing, but it may be suspected that in this piece a different pattern would have been found, for the brief surviving fragment of M anticipates features normally reserved to H2: it exhibits the typical H2 formula of an the initial rising scale, and the following jump from *a* to *c′* already takes it to the highest pitch reached in H2 in 157 and 158.

[379] More explicit modulations occur in 157 H3 (borrowed entire for 158 H3), which is in acem, and 158 H2c, in 31. uzzal.

[380] The breakdown for the individual sections is as follows:

		A	*B𝄳*	*c*	*d*	*e*	*f♯*	*g*	*a*	*b𝄳*
296		4.75	1	0.75	5	0.75	3	2.25	2	0.5
157	H1	0	0	0	9	6.5	17.5	12	11	0
	M	20.5	21	18.5	19.5	6	3.5	3.5	3	2.5
158	H1	0	0	0	2.5	11	15.5	14.5	11	1.5
	M	19	23	17.5	18	6	0	0	0	0
340	H1	6	4	6.5	11.5	4.5	4	3.5	6.5	1.5
		50.25	49	43.25	65.5	34.75	43.5	35.75	33.5	6

for a mode regarded as a secondary derivation) without substance, and that because it is so rare there is nothing that has been composed in this mode (*perde*).[381] Their views are dismissed with a lordly and sustained rhetorical flourish, Cantemir professing himself amazed at such ignorance of the essence of this 'great and enduring' (*mu'aẓẓam ve ḳayyām*) makam. The elevated tone is sustained in the hortatory introduction to his own account, those wishing to understand the nature of dügâh being urged to study the definitions with care, in a kind of methodological prolegomenon one would expect to find not here but before ırak, the first makam to be analysed. The suspicion that Cantemir might be protesting too much is strengthened by the fact that he does not proceed in his normal fashion to discuss the essential modal characteristics of dügâh, but begins obliquely by referring to the attributes of the eponymous note, *A*, a topic to which he will return later: using his standard metaphor of a pole or centre of a circle (*ḳuṭb-ı daire*), he defines it as pivotal to a set of eight notes but then, instead of reaching the natural conclusion that these form the nucleus of the mode dügâh, pulls a totally unexpected rabbit out of the hat, asserting that the mode that results from using these notes in either ascent or descent and has *A* as finalis is, evidently and indubitably, none other than 55. uşşak:[382] this should, he goes on, be obvious, even to those who have been so blinded by lack of insight as to deny that the hitherto unknown makam belonging to the note *A* is uşşak.[383] For Cantemir, it is simply a case of mistaken identity or, rather, erroneous nomenclature: the name uşşak is wrong (i.e. has been wrongly applied to what should have been termed dügâh), and he goes on to add a lengthy argument in defence of this position, which need not be gone into here, in the form of a rhetorical challenge to demonstrate what, otherwise, uşşak might be.

Given this conclusion it is, perhaps, not surprising to find that when (p. 26) we eventually come to the elaboration (*ḥüküm*) it is concerned not with the makam but, again, with the note dügâh, stressing its importance as finalis to so many modes. Even when (p. 27) we reach a passage summarized in the margin as 'the reason for the greatness of the makam dügâh' (*sebeb-i 'aẓamet-i maḳām-ı dügâh*), the subject is again the note *A*. Cantemir's remarks here are of some analytical interest, but apart from specifying that the set of eight notes previously referred to consists of the *E* - *e* octave, they do not further our understanding of a particular mode, whether dügâh or uşşak.

The specification of this particular set of notes does, however, point towards a possible

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[381] اهل موسيقار دوكاه مقامنى بو أنه دكن نه شكل فصل ايده لر مجادله اوزره دوررلر ونه ايدوكى دخى بيان واظهار ايلممشلر ، بعضيسى دوكاه مقامى يوقدر ديرلر بعضيسى بر مَيَادْاسز ١ شعبه در ديرلر وغايت تنك اولدوغى سببى ايله پردهءِ مزكوره اوزره بر تصنيف اولمش نسنه يوقدر ديمك استرلر .

1. Opposite this is added, in another hand, the helpful marginal gloss مادّه سز .

[382] The tone is again quite emphatic:

بالاده ذكر اولندوغى وجه اوزره دوكاه پرده سنى قطب دائرهءِ ثمان پرده ها ايدوب كرك نركدن تيزه كرك تيزدن نرمه حركت اغازه اولنور وقطب مرقومده كلندقدنصكره قرار واستراحتيندن عشاق مقامى پيدا واجرا اولدوغنه اظهار مين الشمسدر ، اويله كه غير مقامك شبهه سنه وارمق بر وجهيله احتمالى يوقدر.

[383] The rhetorical ratchet is tightened yet further:

ايمدى بو انه دكين نا معلوم ونا معروف اولان دوكاه پرده سينك مقامى عشاق مقامى اولدوغنه منكر اولان / عين عقلدن اعما اولدوغنه چشم هيولانيدن كور اولان بله كورر .

reason for the tone, as well as the contents, of this whole passage, for already at this crucial early stage in his survey of the modes Cantemir is faced with an unwelcome asymmetry akin to that discussed in relation to 50. gerdaniye. To all the main notes from *F♯* to *a*, with two exceptions, corresponds a main-note makam of the same name, the exceptions being *A* and *g*. For the latter, as we have seen, a perfectly satisfactory low-high correspondence exists between 48. rast and 23. mahur, but mahur has to be excluded from consideration because, in Cantemir's classification, it is not a main-note mode (a point unfortunately underlined by its name, which ties it to the secondary note *f♯* and, in so doing, provocatively denies the required connexion with *g*). Consequently, the slot had to be filled by the terkib gerdaniye, a mode that should have been disqualified, according to a different classificatory distinction, by its lowly status, but which possessed the inestimable advantage of being identified by name with the note.

The situation with *A* is analogous. In the absence of a makam of this name the uncomfortable options open to Cantemir were either to draft in one of another name or to drag centre stage what, to judge by the comments of the musicians he derides, was no better than a little-known terkib (of which the quoted term şo'be is an equivalent) too marginal to function as the main mode of a composition, and therefore fundamentally inadequate as the representative of one of the most important notes in the gamut. In the event, he tries to bluster his way to a combination of the two, importing uşşak and equating it with dügâh, but the definition of the associated pitch set as consisting of the *E* - *e* octave rather than the expected *A* - *a* betrays a further weakness of the solution, for although uşşak is certainly not a rare terkib but a fairly prominent makam, it is not, properly speaking, a main-note makam: beyond the safe *E* - *e* area it prefers *f* to *f♯*.[384] A further indication of the precarious nature of the solution offered is furnished by his first index, for here all pretence is abandoned: the same rising sequence of main-note modes simply jumps from rast (*G*) to segâh (*B♭*) (and also, incidentally, from eviç (*f♯*) to muhayyer (*a*)): uşşak assumes its rightful place, along with mahur, among the secondary-note makams, and no attempt is made to conjure up an entry for dügâh.

In the light of all this one would hardly expect to find anything in the corpus of notations labelled as dügâh, and if one did the prediction would surely be of a mode impossible to differentiate from uşşak. But as so often, expectations are not fulfilled: there is, indeed, one piece stated to be in dügâh, 39, while 38, in muhayyer, has the odd title yürük dügâh. Neither could be mistaken for uşşak. But nor could they be mistaken for each other, and although their juxtaposition cannot be fortuitous the verbal connexion remains mysterious to the extent that it is impossible to detect any special common element at the level of structure to which the label might be related. Despite the rather unusual ordering of events in 38 H1 there is no good reason to query this piece being assigned to 51. muhayyer, while in the index it is under 58. hüseyni that 39 is to be found. In fact, 39 proclaims its identity as hüseyni right from the opening descent to *A* which the two have in common, and consideration of this piece may, accordingly, best be deferred, leaving its heading for the moment to serve simply as a reminder of a relationship made explicit in the first piece in 'Alī Ufḳī's collection, which is stated to be in dügâh-hüseyni.

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[384] The preference for *F♯* over *F♯* within it would appear to be a more crippling disadvantage, but given that the same preference occurs in rast it seems to be something that Cantemir was prepared, or obliged, to overlook.

55. uşşak

The following pieces are in this mode:

98, 99, 201-4, 232, 345

and it is also exemplified in 296.

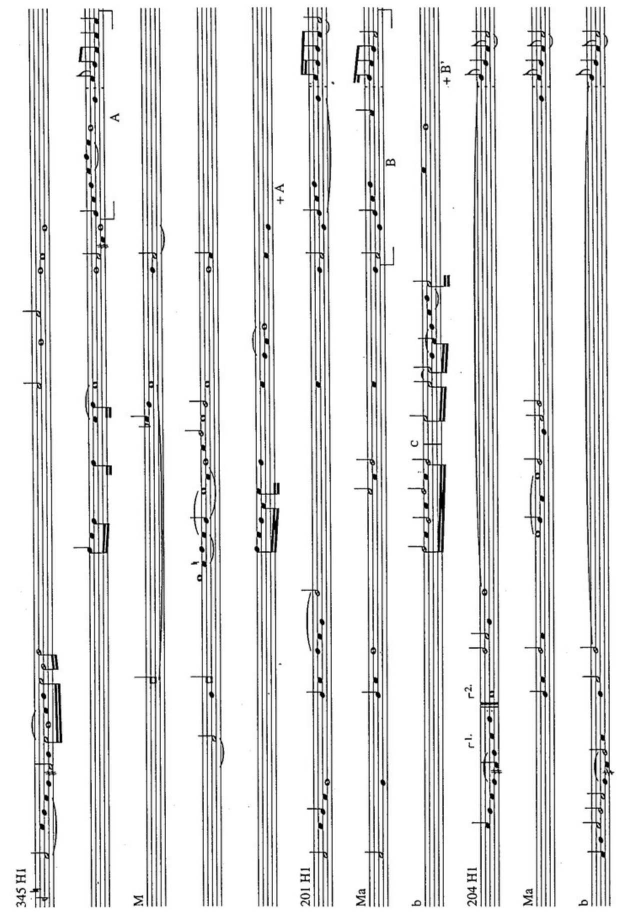
56. uşşak aşirani

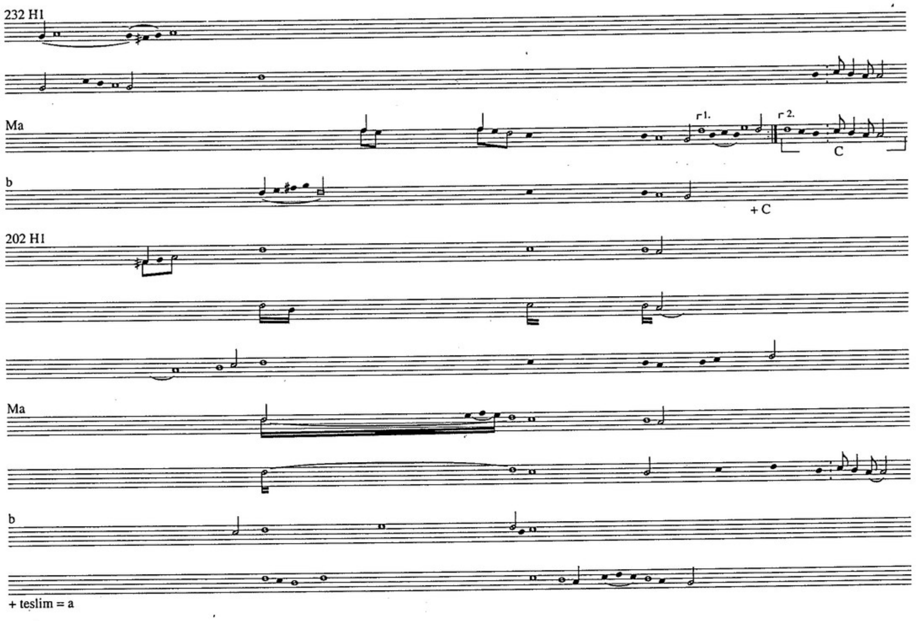
There is just one piece in this mode, 323.

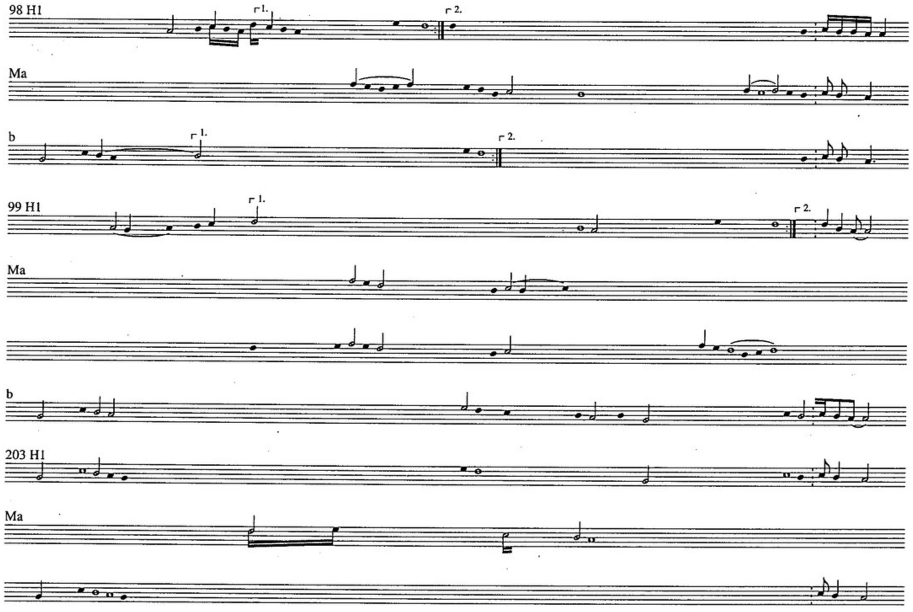
There is no separate description for uşşak (nor, *a fortiori*, for uşşak aşirani): Cantemir deals with it in the course of his discussion of 54. dügâh. From his reference there to *A* as the central pivot of a set of eight notes we might expect uşşak to consist essentially of two parallel conjunct tetrachords, *E* - *A* and *A* - *d*. In the notated repertoire, however, the lower tetrachord fails to be established as a structural unit, for while *A* and *G* are both prominent *F♯* is not (being in any case sometimes replaced by *F𝄲*), and *E* is generally absent. Indeed, in half the corpus *G* is the lowest pitch encountered, and *E* is confined to a single fleeting appearance in just one piece, so that it would be more accurate to speak of the kernel of the exposition being based on the *G* - *d* pentachord or preferably, given the identity of the finalis, the two overlapping tetrachords *G* - *c* and *A* - *d* with, above, *e* and *f*.

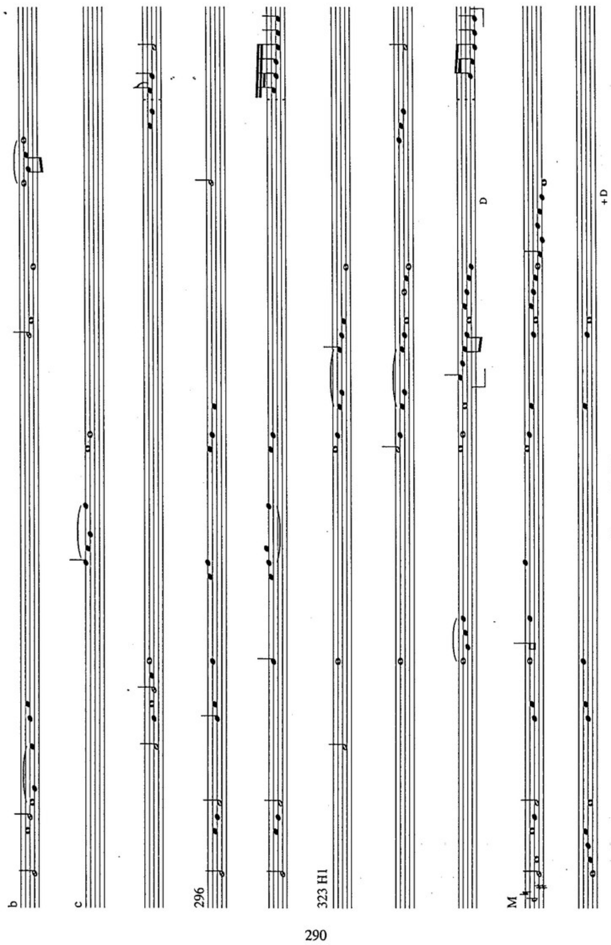
Except in 202, the first cadence on finalis *A* occurs within H1, but given the number of pieces involved M can also be included in the abstract of the exposition given in ex. 81, and doing so has the advantage of showing the shift of emphasis M normally exhibits. 323 in uşşak aşirani is also included. As ex. 81 shows, most (sub)sections could be described in terms of the tripartite structure commonly encountered before: an initial motif marked by a jump from *G* or *A* to *c* followed by a descent to *A* or, more commonly, G (p); an ascent or jump to *d*, the main area of elaboration, which in most cases uses either the *B𝄳* - *d* trichord below or the *d* - *f* trichord above (q); and a descent to *A* or, more commonly, *G* (r), followed by the cadence material. The first element is sometimes omitted, and the order of the first two may be reversed, but overall there is a high level of consistency. (It may be remarked, incidentally, that the initial motif echoes that frequently encountered an octave above in 51. muhayyer, and the argument that uşşak may be regarded, accordingly, as the lower octave counterpart to muhayyer could profitably have been used by Cantemir to bolster his case for it being the rightful occupier of the *A* slot in his survey of the main-note makams.)

Comparison between H1 and M shows that the former concentrates in most cases on the *G* - *d* segment, while in the elaboration of the area around *d* it is in the latter that we more frequently encounter *f* (with the occasional addition of *g* also), and there is, correspondingly, a general tendency for *G* and *A* to be more prominent in H1, and *c*, *d* and *e* in M, and for *F♯*/*F𝄲* fairly common in H1, to all but disappear from M (except in the special case of 323 in uşşak aşirani). The most dramatic contrast or, more prosaically, the clearest separation of elements, occurs in 232, where H1 concentrates almost exclusively on the initial motif and




232 H1
r 1.
r 2.
Ma
C
b
+ C
202 H1
Ma
b
+ teslim = a


98 H1
r 1.
r 2.
Ma
b
r 1.
r 2.
99 H1
r 1.
r 2.
Ma
b
203 H1
Ma



Example 81

the rest is severely truncated (with *d* the highest pitch), while in M the initial motif is omitted and there is repeated elaboration of the area above *d*.[385] As displayed in ex. 81, the only piece not to include a version of the motif is 202, but it could be argued on the basis of the lack of any elaboration of the first *d* in H1 that the whole first line is nothing but an expanded form thereof.[386]

If in H1 and M there is a considerable degree of similarity throughout the corpus—a topic to which we may return below—rather greater variety is encountered in H2, even though it can be described in most cases in terms of the customary rising-falling curve. Both 98 and 99 begin with an ascent via *f♯* to prominent *a*, after which there is a jump or a descent via *f* to prominent *d* and a final cadential descent to *A*,[387] the whole being sufficiently reminiscent of 53. baba tahir (even if without the intermediate gerdaniye-like element) to warrant classification as a modulation, especially as *f♯* does not occur in the other uşşak pieces, with the exception of 232.[388] But whatever the appropriate designation, 98 and 99 clearly form a subgroup distinct from the remainder, as can be seen from ex. 82 (which omits 232, where H2 simply transposes H1 up an octave).

202, 203 and 204 form a contrasting subgroup: all begin in the same way with elaboration of the area around *d* and also have in common that they do not ascend above *g*, which may, nevertheless, be prominent.[389] There is, however, considerable variation in the extent to which the following descent is elaborated. The other two pieces, 201 and 345, differ from both subgroups and also from each other. They resemble 98 and 99 in exploiting a higher register, but do this in different ways—and also ascend further, in the case of 201 to *d'*.[390] 323, in uşşak aşirani, again stands somewhat apart, despite combining various of the above features. Although in the *f♯* camp, it bears some resemblance to both 345 and 201 in its range and general melodic contour.

These various subgroupings are of significance in trying to assess whether certain similarities are to be attributed simply to the nature of the mode, or whether they result from common authorship, for the corpus we have is, if the attributions are to be trusted, dominated by two composers, Zurnazen İbrāhīm Ağa with two pieces and Solakzāde with no fewer than four. The complex question of the reliability of attributions (and hence the difficulty of defining for a given composer an appropriate body of work to be analysed for stylistic coherence) will be touched upon in 4.3.3. In the present context, however, one can at least

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[385] In 323, on the other hand, the (in any case brief) shift of emphasis in M is, as might be expected, to the lower *D* - *G* tetrachord.

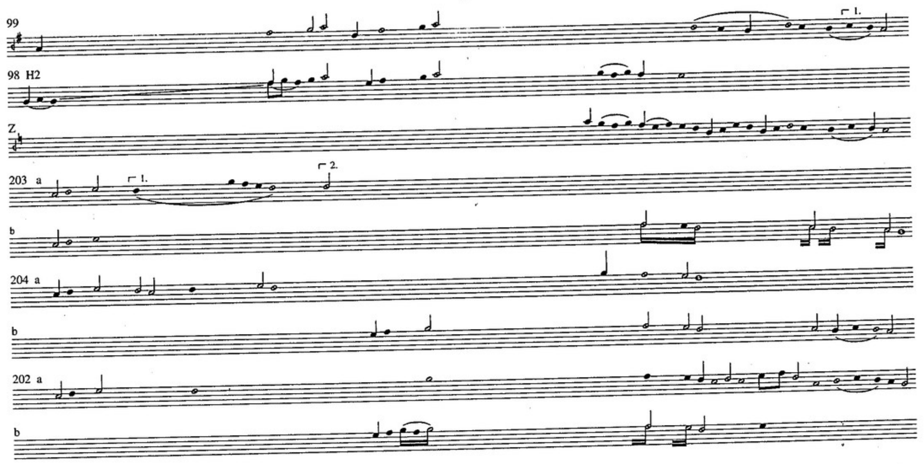
[386] With the repeated *F♯ G A* corresponding to the initial oscillation of *G* and *A* found elsewhere, and the *A d c B♭ A* contour likewise enlarging the standard *A c B♭ A*.

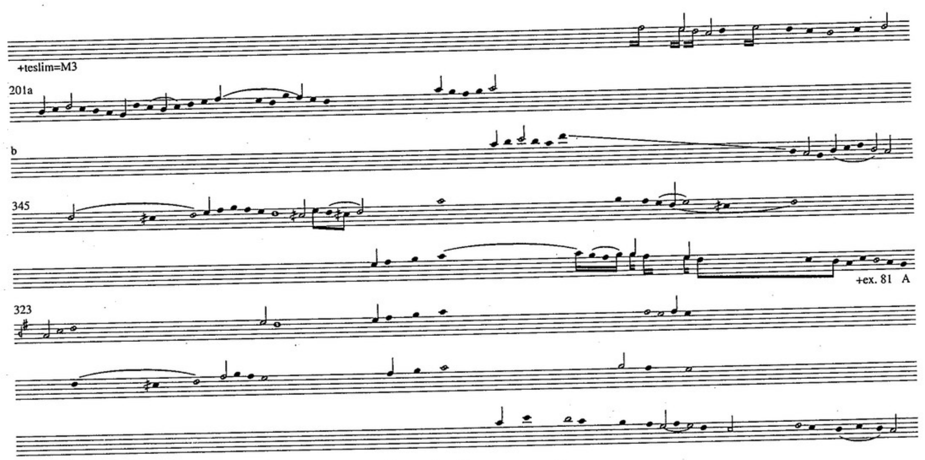
[387] In 98 this comes not in H2 but in the following Z.

[388] In this instance, however, the reason is not modulation but transposition, for H2 is nothing other than a twofold repetition (with minor rhythmic variations) of H1 at the octave, the first time, oddly, with *f♯* in place of the expected *f♯* which, however, is restored the second time round.

[389] It is made so in 204 by transposing the beginning of H2a up a third in H2b.

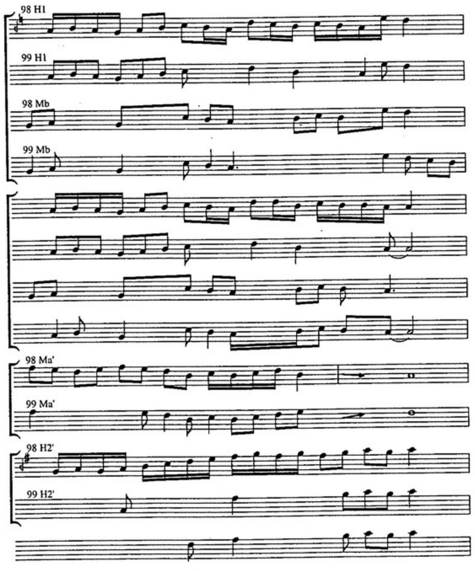
[390] In 201 H2a, after initial elaboration of *d*, a rising sequence reaches finalis *a*, and H2b then rises to *d'*. In 345 frequent use of a (sometimes varied) *d c♯ d* flexure, which also appears in a standard cadence formula (at the end of the first line) serves to emphasize the focus on the *d* - *a* pentachord.





Example 82

ask whether the two sets of pieces are marked by internal similarities that mark them off in some way from each other and from the other two pieces (but without considering whether such similarities might be less the effect of single authorship than its cause); that they do is shown clearly by the evidence of H2, which points unequivocally to a relationship between perceived authorship and modal strategy: the two pieces in the first subgroup, 98 and 99, are the two attributed to Zurnazen İbrāhīm Aġa, while the three in the second, 202, 203 and 204, are all attributed to Solakzāde.

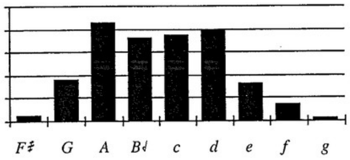


Example 83

Such consistency within, and contrast between, each of the two subgroups would accord well with the notion of an individual style. But in the case of 98 and 99, consideration of H1 and M in conjunction with H2 forces a more extreme conclusion: whether or not they show signs of an individual style, parts of them have virtually the same pitch contour and are, essentially, no more than different rhythmic manifestations of a single melodic concept, with Mb providing a variant of H1, as may be seen from ex. 83 above.

Despite having the same range and similar melodic strategies in both, H3 shows no signs of such close melodic congruence: possibly the generally greater amount of freedom available in H3 encouraged diversity. Likewise with the group of four Solakzāde pieces, where greater differences of range and emphasis are encountered, with 204 modulating into 26. beyati. But scrutiny of H1 and M also fails to reveal any significant common traits over and above those dictated by the general trajectory of the mode which would suggest the presence of an individual style: it would seem that if there is any personal fingerprint in these pieces it is best identified in the similar beginnings that three of them exhibit in H2.

The remaining material does not require comment.[391] In the display of relative duration, which covers both H1 and M, only the prima volta version of 232 Ma has been counted. In 202 the teslim in Mb, which repeats Ma, has been omitted. *e♭* is subsumed under *e*. *E* (one time unit in 345) is omitted, so that we have:[392]



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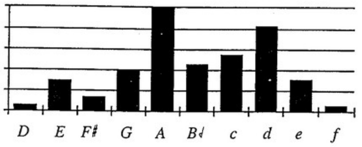
[391] 345 has one or two internal modulations, hinting at beyati in M and, briefly, 17. nihavent in Z, while H3, which concentrates on a gradually unfolding development from *d* to *A*, could reasonably be said to occupy an area of overlap between uşşak, beyati and, in part, 35. acem. In 232, after the transposed repeat that forms H2, H3 echoes parts of Mb within its fundamental *d* → *A* progression. 323 H2 is followed by Z, which for half its length elaborates the area around *d*, and cadences on *A*, while H3, despite giving a degree of prominence to *G* and *e*, hardly strays far from uşşak, beginning, indeed, with the standard initial *G c B𝄳 A* motif.

[392] The breakdown for the individual pieces is as follows:

	F♯	*G*	*A*	*B𝄳*	*c*	*d*	*e*	*f*	*g*
232	1	17	22	10.5	7.5	23.5	8.5	5	1
202	2	8	22	28	32	36	13	3	0
203	0	21	33	26	24	16	6	2	0
201	0	6	24	20	23	25	11	3	0
98	0	5	18.5	18.5	11.5	12	4.5	2	0
99	0	8	24.5	19	11.5	16.5	8.5	7	1
345	3	12	32	26.5	43	28	18.5	10	2
204	3	7	24	20	22	24	4	0	0
	9	84	200	168.5	174.5	181	74	32	4

Thus despite the initial prominence of *G*, it is clear that the crucial area is the *A* - *d* tetrachord, which accounts for 78% of the whole, with the finalis *A* slightly more salient than the other three notes.

The comparable profile for uşşak aşirani is:[393]



Assuming this single example to be representative, it may be noted that the percentages for *G*, *d* and *e* are almost exactly the same as in uşşak, whereas *A* is more salient; and that the necessarily increased values for the lower notes are achieved less at the expense of the upper ones than of the internal members of the *A* - *d* tetrachord.

2.2.13 *neva*

In parallel to the other low-register main-note modes it should have been possible to speak of a neva group. However, the modes that would most naturally have been assigned to it, 20. nühüft, 52. arazbar and 53. baba tahir, have already been discussed, so all that remains is neva itself.

57. neva

The following pieces are in this mode:

19, 20, 43-5, 51-7, 59, 60, 62-72,[394] 191-3, 205, 231, 233, 257, 294

and it is also exemplified in 296.

Consisting of no fewer than 33 pieces, the neva corpus is second in size only to that in 58. hüseyni. Cantemir's account (pp. 30-1) begins with a characterization: neva is described as a 'dear/powerful and pleasant' (*'azīz ve laṭīf*) makam with 'grand' (*ulu*) notes, presumably a reference to the particular importance within it of *A* and *d*. *A* is stated to be the pivot (*ḳuṭb-ı daire*) of the *D* - *d* octave[395] and at the same time the initial of neva, the nucleus of which is formed by the notes *A B*𝄳 *c d*, while above *d* there is a further characteristic nucleus formed by the notes *d e f*♯ *g*. Three cadence notes are then identified: *A*, the neva finalis proper; *d*, which provides a suspended cadence (*asma ḳarār*); and *E*, which signals for contemporary musicians the compound [makam] they call nühüft, but for Cantemir the terkib that long ago (*ḳadīmden*) had been termed neva aşirani. The following expansion defines the range beyond the initial *A* - *d* nucleus as extending on main notes up to *e'* and down to *D*, and finally gives the modulatory family as consisting of the 'used' terkibs 52. arazbar and 53. baba tahir; the 'unused' terkibs neva-yi aşiran (synonymous with the ancient neva aşirani with finalis *E*), neva-yi uşşak and sultani neva; and, added in the margin, 50. gerdaniye.

Cantemir then refers to the fact that some of these had been mentioned in relation to the 'makam dügâh', by which may be understood rather that they had previously appeared in the list of terkibs with finalis *A*, and it is, indeed, to this feature that he appeals in answer to the question of how a terkib can be attached to two different makams: they are linked to 54. dügâh solely by the shared identity of the finalis, while their relationship with neva is defined in terms of affinity (*ünsiyet*, lit. 'familiarity'), pointing to further areas of modal overlap. Finally, he notes that some people have deduced by analogy that neva is of 24 types, but comments that he has encountered no other terkibs apart from the above-mentioned from either singers or instrumentalists, nor is there a vocal (*beste*, *kâr*, *nakış*) or instrumental (*peşrev*) composition based on those other terkibs which, accordingly, should be assigned to the notional *ismi var cismi yok* category (discussed in relation to 49. rehavi).[396]

Thirteen of the 33 neva pieces are also recorded by 'Alī Ufḳī, but of these, three (19, 69 and 71) are assigned to 55. uşşak, and one (54) to 26. beyati (qualified as arazbari); and it is perhaps worth adding that according to an eminent modern authority there is another (45) which is also in beyati.[397] Given Cantemir's definition of the nucleus of neva as the *A* - *d* tetrachord, the area of most intense activity in the system as a whole, some degree of overlap with these two modes is only to be expected (as well as with others such as 35. acem), and such differences of opinion, especially with regard to those pieces in which *f* is preferred to *f*♯, are therefore hardly surprising. They do, however, raise in acute form the question of the criteria used to assign to different modes pieces which for the most part develop the same central segment of the gamut in similar ways, and how they could be interpreted to produce different results. It is relevant here to note that in neva, according to Cantemir, *A* is both initial and finalis, which suggests for the *A* - *d* tetrachord a predominantly rising-falling contour, and at this level of generalization there should be a greater potential for overlap with uşşak than with beyati or acem, where it is predominantly falling.

The corpus of notations does not, however, bear out Cantemir's contention. Inevitably, given its size, a high degree of conformity with his theoretical abstraction cannot reasonably be expected; nevertheless, it is still more than a little disconcerting to find that *A* is hardly

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[393] The figures for 323 are as follows:

D	*E*	*F*♯	*G*	*A*	*B*𝄳	*c*	*d*	*e*	*f*
2.5	12.5	5.5	17	44	19.5	23.5	36	13.5	2

[394] 70 is not given a specific mode heading: but it has the title büyük neva and is placed in the neva section of the index.

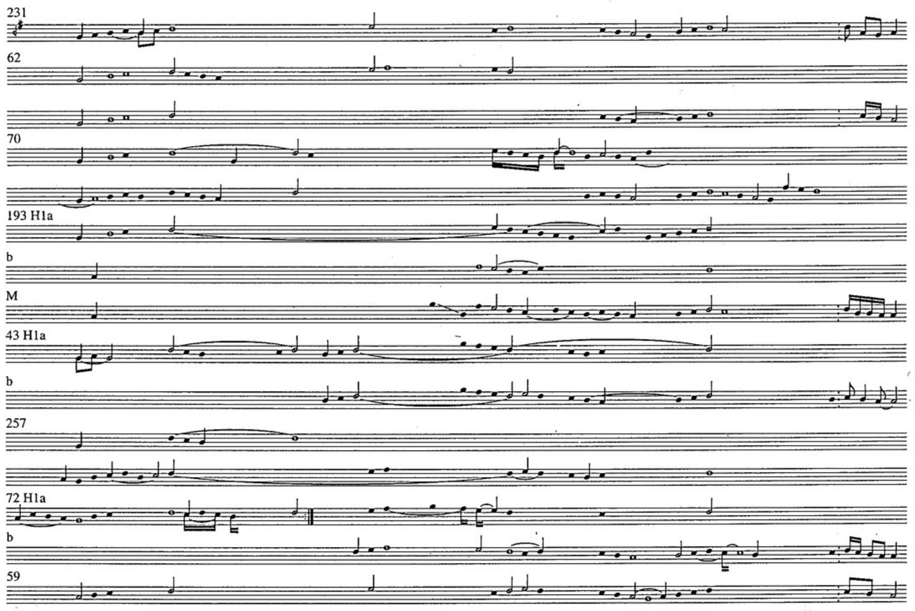
[395] Rather than *G*, presumably, because the marginal status of *D*, allied to the factor of parallelism, gives precedence to the conjunct tetrachords *d* - *A* and *A* - *E*.

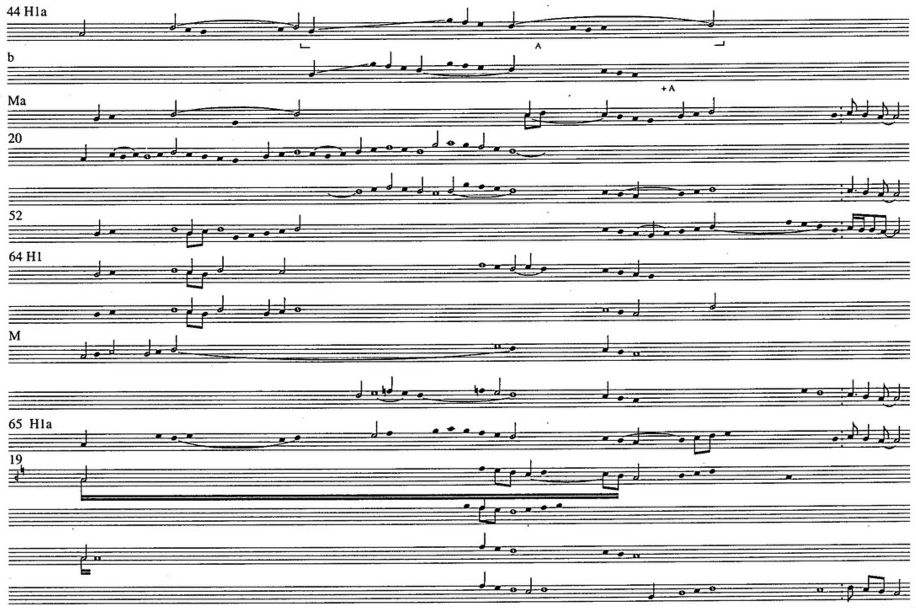
[396] The text of this final passage is:

بعض كمسنه لرك عقلى اوزره يكرمى دورت درلو نوا اولور قياس ايدرلر ولكن بز ذكر ايلدوكمز تراكبدن غيرى نه خواننده دن نه سازنده دن ايشتدوكمز واردر نه بر بسته كار نقش ياخود پشرو اول تركبلرك اوزره تصنيف اولشدر انكيچون بو مقوله تركباتى اسمى وار جسمى يوق تركبلردر ديرز .

The '24 types' thus presumably refers to variants constituting a theoretical set of neva-related terkibs.

[397] For details see the notes to these pieces in Part i.


231
62
70
193 H1a
b
M
43 H1a
b
257
72 H1a
b
59


44 H1a
b
Ma
20
52
64 H1
M
65 H1a
19

Example 84

ever initial;[398] nor is it the first focus of elaboration, and many pieces begin on or around *d*.

This suggests not only that locating the dividing lines between it and other modes may be a somewhat delicate process but also that neva itself may contain internal divisions. Reference has already been made, for example, to the fact that in a number of pieces *f* is preferred to *f*♯ and in some, indeed, *f*♯ fails to appear at all. In this respect it might be helpful, for purposes of presentation, to break the corpus up into subgroups, although rather than rely on the *f*/*f*♯ divide we may begin, as with rast, with those pieces which begin relatively low, which in this case means with an ascent from *G*, *A* or *B*𝄳 to *d*. But instead of stopping at that point the exposition in ex. 84 above is tracked down to the first cadence on *A* (or, if there is none, as in 70 and 257, to the first cadence on *d*). Only in 44 and 193 does this require the inclusion of all or part of M.

By whatever means *d* is first reached, it will be seen that in most cases it is marked as prominent by position and/or duration and is then the focus of extensive elaboration. This more frequently begins with the notes below (the decision to present the material in two segments, first lower and then higher, was arbitrary, and taken merely for the sake of clarity). There is then generally a descent to *A* or *G*, but as this is followed by another ascent to *d* (after which comes the final cadence), this area could reasonably be considered parallel to, or even a further extension of, the main block of elaboration. With the six pieces beginning from *G* we encounter yet another area of overlap, for the *G* → *d* ascent is a feature shared with 48. rast and 49. rehavi, and the question is therefore at what point the listener has been given appropriate information to arrive at the correct identification. Assuming that *G* is not marked as prominent at the very beginning, it may be suggested that the clues given before the final cadence is reached consist of a combination of factors, or perhaps rather nuances, rather than in any one obviously contrastive element, so that in neva one may point to the absence of any later emphasis on *G*, occasional emphasis on *f*♯ during the course of the elaboration of *d* and, most important of all, the very length of that elaboration, as a result of which one would expect the statistics on duration to produce for it a significantly different profile. But complications can still arise, and in the case of 244 (in 24. pençgâh), for example, it is difficult to see how identification as neva could be excluded before the final cadence of H1 is reached. It may also be suggested that once the principal mode is established, greater latitude becomes possible: for much of their length 108 Ma and 238 Mb (both pieces in 48. rast) are also surely congruent with neva, and various pieces in neva likewise contain extended areas congruent with other modes, thus underlining yet again that with modes using the same pitch set the boundary between overlap and modulation may be fuzzy or, indeed, non-existent. With the other six, which begin from *A* or *B*𝄳, there is potential confusion with uşşak or beyati, but for the most part this is soon dispelled.[399]

The widest range exhibited in ex. 84, *G* - *b*𝄳, only occurs once, in the necessarily extended presentation required by the darb-ı fetih cycle of 20. Elsewhere the range is an octave (*G* - *g* or *A* - *a*) or less (*G* - *f*♯, *f*, or *e*). In those pieces where the range in the first

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[398] And one piece (72) that has initial *A* in fact proceeds to display the initial *A c B*𝄳 *A G* uşşak formula.

[399] Again, however, not every case is clear cut, and one may note in particular 159 H1 (in beyati), which could readily be mapped onto ex. 84, fitting neatly between 20 and 52, and being therefore indistinguishable from neva, at least at this level of analysis.

(sub)section is relatively narrow one might expect the remainder of the exposition to extend it further, and in most cases this does indeed happen.[400] Where the initial range is an octave or more, the continuation may maintain this or reduce it, omitting either *G* or the upper notes.[401] The continuation of the exposition generally follows the basic lines of development seen in ex. 84, although in most cases the onset would not be placed left, as the following (sub)sections generally begin not around *G* or *A* but around *d*, and a few begin even higher, with initial *f*♯ or *g*.

As with rast, therefore, the continuation of this first group of pieces tends to resemble the onset of the rather larger remainder of the corpus, which consists of the 20 pieces beginning from *c*, *d*, *e* or even *f*, as shown in ex. 85.

Here the widest range is found in 71, which descends to *D* and is exceptional in exploring the lower register. Elsewhere matters are as before and, again, a relatively narrow range in the first (sub)section may be extended in the remainder of the exposition.[402] Where the initial range is an octave it is generally maintained or extended in the continuation.[403] But there are also cases where the highest pitch in M is lower than that in H1, as in 53, 191 and 192, suggesting the possibility of increasing emphasis on the *d* - *A* tetrachord as the exposition progresses.

The beginning apart, the profile of ex. 85 is, as expected, generally similar to that of ex. 84. There is, perhaps, slightly less emphasis on elaboration below *d*, even if 66 consists of little else, but certainly not to the extent that a particular distributional pattern can be detected. As before, the continuation of the exposition in the pieces in ex. 85 follows the same lines of development and could, therefore, readily be mapped onto it: the later (sub)sections again generally begin in the area of *d*, sometimes providing a counterbalance to H1 by first developing the area below, although only in 57 (beginning on *G*) and 66 (on *A*) does exploration of the lower segment not begin from around *d*.

All but one of the pieces for which other modal identifications have been put forward occur in this second group, although the initial emphasis on *d* would suggest that uşşak ought to be a less likely alternative than beyati. But there are also other points of similarity, for the initial *d* - *G* - *d* fanfare-like figures in 191, 192, 57 and 53 are immediately reminiscent of rast, while in the earlier group the gapped cadence of 231 is suggestive of 22. kürdi (cf. 154). However, in none of these cases is the similarity sufficiently sustained to warrant the suspicion of modulation.

With the exception of 57, where we find a modulation into beyati (and hardly any high register material), H2 follows expectations, shifting the emphasis up to the *d* - *a* pentachord. In most pieces the register above *a* is little used, but as H2 normally extends the range

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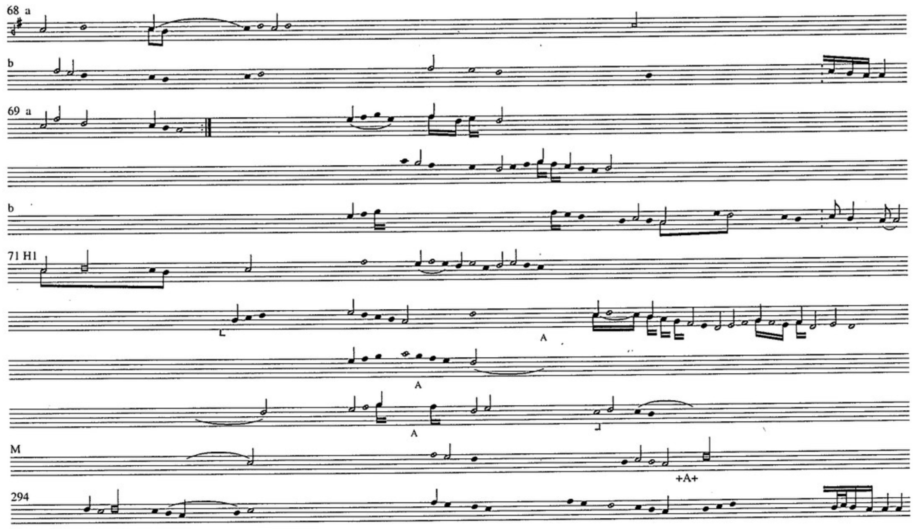
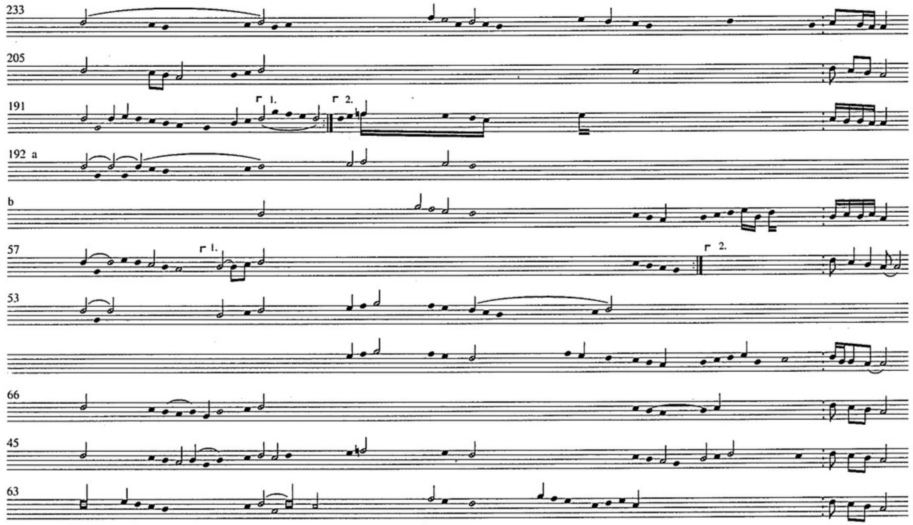
[400] In 231 only minimally, from *G* - *e* to *G* - *f*, but in 59, 70 and 257 from *G* - *f* or *f*♯ to *G* - *a*.

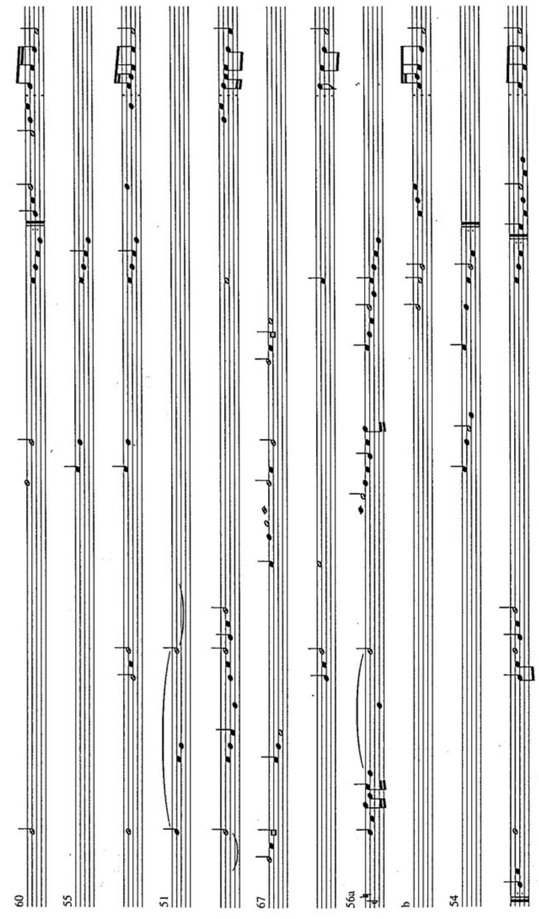
[401] So that in 20 we move from *G* - *b*𝄳 to *G* - *g* and 62 from *G* - *g* to *G* - *e*. 19 is thus exceptional in extending H1 *G* - *g* to M *G* - *b*𝄳, although in the light of the fact that it also switches from *f* (with hints of acem) in H1 to *f*♯ (with possible hints of baba tahir) in M no particular significance need be discerned in this.

[402] As in 205, from *A* - *e* to *G* - *f*, 51, from *G* - *e* to *G* - *g*, and 66, from *G* - *e* to *G* - *a*. But 57, with *G* - *e* throughout, and 54, with *F*♯ - *e* throughout, show that such extension is not universal.

[403] Examples of extension upward are provided by 60 (from H1 *G* - *g* to M *G* - *b*𝄳) and 233 (from H1 *A* - *f*♯ to M *G* - *b*𝄳).


68 a
b
69 a
b
71 H1
L
A
A
A
M
+A+
294


233
205
191
1.
2.
192 a
b
57
1.
2.
53
66
45
63



Example 85

beyond that of the exposition it reaches *c'* or *d'* in the rare cases where H1 and/or M go up to *b*𝄳. In considering the various strategies employed in this section it would again be convenient to begin by dividing the corpus into two groups, but this time following the line of cleavage suggested by the distribution of *f* vs. *f*♯. Accordingly, we may present first, in ex. 86, the eight pieces in which we find only or predominantly *f*,[404] tracking them down to *d* in descent.

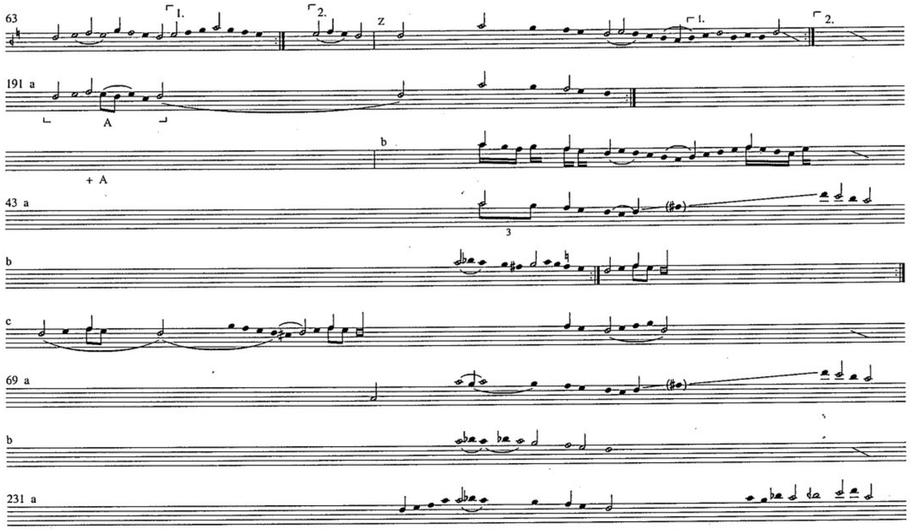
As ex. 86 shows, there is one element common to all: a descent from *a*, frequently accompanied by an *a* *b*♭ *a* flexure, to *d*. This may be followed by a further descent to finalis *A* (in which case it is sometimes elaborated) or an ascent to *d'*, always in the context of an upper octave cadence on *a*. An optional second element that occurs in four pieces may be summarized as an elaboration or variation of a *d* → *f* → *d* trajectory, thus yielding an overall triadic *d* → *f* → *d* → *a* → *d* (→ *a* or *A*) contour. The general effect is of an approach towards 35. acem that does not actually arrive, the frequent use of *b*♭ helping to maintain a different identity.

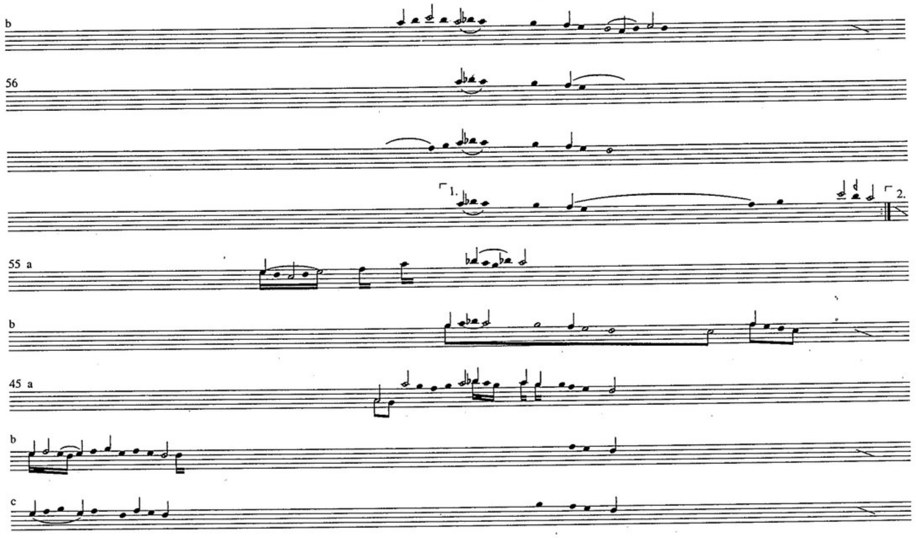
A further five pieces resemble the above in containing an *a* → *d* descent (always with *b*♭ and *f*), but in each case preface this with a different second element, an ascent to *a* via *f*♯. Given the individual contour of the ascent in 51 it is appropriate, for purposes of comparison, to place alongside it a sixth piece, 70, which has a virtually identical initial contour, and also bears some resemblance in descent, but with the major difference that it retains *f*♯ here. These six, which are presented in ex. 87, are, likewise, all of a piece, their similarities being sufficient to differentiate this descending scale pattern from the previous one: common features here are either ascending beyond *b*♭ or prefacing the *a* *b*♭ *a* flexure with *g*, and elaborating *g* in descent with the figure *g* *(c')* *b*♭ *a* *g*. In comparison with the previous group it may be noted that *f* is less likely to be positionally prominent. As there is also considerable consistency in the *f*♯ - *a* element it is difficult to avoid the conclusion that in this case too we are confronted with various manifestations of a common modal identity, even if one not readily identifiable.[405]

To the extent that *f* and *f*♯ are equally important the second set can be viewed as intermediate, for in the remaining and largest block of pieces, as in 70, which properly belongs to it, it is *f*♯ that predominates, appearing in descent as well as ascent. Not surprisingly, in view of the much larger number involved (19 in all), there is less justification for regarding this as a homogeneous group. In four (44, 70, 233 and 257), incidentally, there is an echo of what has gone before in the use of an *a* *b*♭ *a* flexure; but a much more

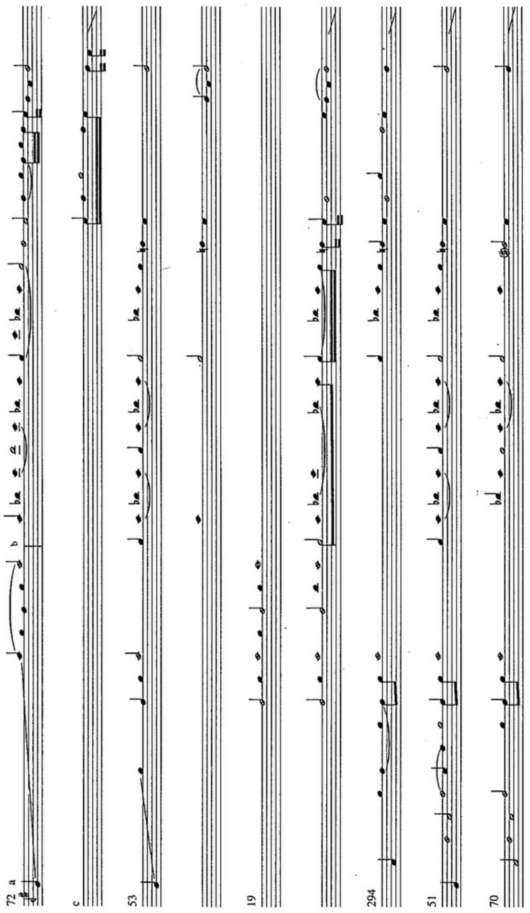
[404] There are, incidentally, four pieces (57 and three in this group, 45, 55 and 56) which in their entirety contain not a single instance of *f*♯, a fact which raises a question-mark not so much about Cantemir's categorization of neva as a main-note mode, justified on the ground that it is much more common to find only or predominantly *f*♯, as about the extent to which it might be characterized by potential overlap not only with uşşak and beyati but also with acem.

[405] There is no trace of the gapped descent typical of the mode with which *b*♭ is characteristically associated, 21. sünbüle. Remarkably similar to the descent passage is that in H2 of 116 in 17. nihavent (and it may be noted in this connexion that 51 continues after *d* in descent with a modulation into nihavent, thus echoing the upper *b*♭ with *B*♭), but although the preceding ascent in 116 also closely resembles that in 53 it is with *f*, so that identification with nihavent has to be excluded for the passage as a whole. Also to be noted is the similarity with 340, in baba tahir.





Example 86



Example 87

important common feature is the clearly articulated *a* → *d* descent (if via *f*♯) that may form a major element.[406] Elsewhere, however, it may be less prominent, being embedded within a more complex melodic development;[407] and in yet other (sub)sections importance may attach, rather, to a *g* → *d* descent.[408]

Mention has already been made of one or two modulations in H2, but it is, as expected, principally in H3 that modulations are encountered. The most common choices are not, for once, the members of the hicaz family, these being, indeed, conspicuous by their absence,[409] but, interestingly in view of the modal identity of the several cases of H2 displayed in exs. 86 and 87, acem and nihavent. Indeed, it is sometimes in those very same pieces that they appear: thus acem may be identified in three of the six pieces in ex. 86 and two of the six in ex. 87,[410] nihavent in two and three respectively,[411] and among them are two in which we even encounter both modes. The relationship can hardly be fortuitous, for it generates (or is generated by) an obvious trichordal parallelism (*b*♭ *a g*/*f e d*/*B*♭ *A G*)[412] which reaches its fullest expression in 72, where H2b **1-2** (with *b*♮) is not only transposed down an octave in the latter part of H3b but is also transposed at its beginning down a fifth, thus producing *e*♭, with the result that the whole seems to be a novel combination of 2. karcığar and nihavent.[413] In other contexts the presence of *e*♭ may be interpreted more obviously, as signalling a modulation into beyati, the only other mode to appear with any frequency.[414]

There is also, inevitably, a scattering of other modulations. These, it may be noted, are sometimes into areas that elude easy identification,[415] what is involved being usually a change

[406] As in 20, 44, 54b, 62, 68a and 193.

[407] As in 20, 60, 64, 65a, 66, 67 and 233b.

[408] As in 52, 52a, 65b, 71, 192, 233a and 205a.

[409] They are represented only in 52 H3a, where we encounter uzzal/hicaz.

[410] In 43 H2c, 45 Mc, H2b, c and part of H3b, and 56 H3; and in 19 H1, and 294 Z. Elsewhere it may be identified in 205 Ma, H3 and 257 H3. However, given the extent of overlap it is not always easy to tell neva (with *f*) and acem apart. As this material generally starts with a *d* → *f* ascent it seems most improbable that any of it could be equated with the 'unused' terkib neva-yi uşşak, mentioned as a member of the modulatory family, which in the absence of any description might be expected at least (or rather, at most) to use the same pitch set.

[411] In 45 H3a, b, and 231 H3a; and in 19 H3, 53 Mc and (if only just hinted at) 72 H3a. Elsewhere it may be identified in the beginning of 57 H3a and in 60 H3a, 63 H3, 191 H3 and 192 H3.

[412] Most clearly expressed in 231, where the beginning of H2a, *d e f g a*, is echoed by the initial *G A B*♭ *c d* of H3a.

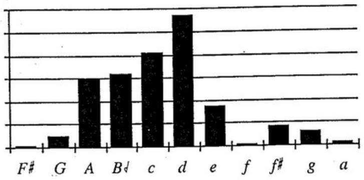
[413] A similar transposition in 63 (of a passage in Mc with *B*♭ up a fourth in H3a, once more yielding *e*♭, suggests initially a shift to 26. beyati, but as the continuation is again with *B*♮ the whole section is best related modally to 72 H3b. As for 63 Mc, comparison with the exemplification of sultani ırak in 296 suggests the possibility that we may have here an instance of sultani neva, another of the 'unused' terkibs listed by Cantemir but not described.

[414] It appears in four pieces: 57 H2, 69 Ma, 70 H3 and 233 H3. 69 Ma and 70 H3a open in remarkably similar fashion.

[415] However, one may fairly readily point to the presence of 48. rast in 62 H3; rast (or a related mode) + 45. segâh in 193 H3; segâh/46. maye in 43 H3b; and 44. eviç in 64 H3a. 55 H2b appears to be largely in 14. çargâh. 44 H3b should be assigned to 58. hüseyni, but it may be noted that it opens with a transposition one degree lower of the beginning of H3a, which is in a hitherto unidentified mode.

of emphasis rather than anything so clearly indicative as a change of pitch-set. Indeed, it is worth observing that the lowering of *e* to *e*𝄳 is the only frequent change in the immediate vicinity of *d*: the standard raising of *c* to *c*♯ associated with the hicaz family is restricted to just one piece, while substitution of *B* for *B*𝄳 virtually never occurs, in other words the modes of the buselik group are likewise not among the standard modulations associated with neva. Given such stability one would certainly not expect to find any alteration to *d* itself, and there is, indeed, no trace of 25. saba.

The first display of relative duration is based on a random selection of 14 pieces consisting of every other piece in ex. 84 and every third piece in ex. 85. In all cases H1 and M are included complete, except for 53 Mc and 63 Mc, which contain a modulation into nihavent and are omitted. *B* is subsumed under *B*𝄳. *F*♯ (half a time unit in 191) is omitted. We thus have:[416]

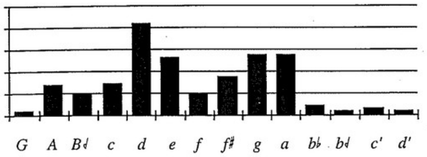


This demonstrates very clearly the salience of *d* (above which the values drop very sharply) and the general prominence of the *A* - *d* tetrachord, which accounts for 80% of the whole. Also quite marked is the imbalance between *f* and *f*♯, which underlines the normative status of the latter, thus rendering all the more surprising its absence from 51 where, unlike 54 and 231, the range extends up to *g*.

[416] The breakdown for the individual pieces is as follows:

	F♯	*G*	*A*	*B*𝄳	*c*	*d*	*e*	*f*	*f*♯	*g*	*a*
231	0	3.5	12	11	18.5	26.5	9	3.5	0	0	0
70	0	6	19.5	21	36.5	51	9	1	6	1	1
43	0	4	20	27	28	44	12	1	4	4	0
72a	0	8	61	58	69	109	26	0	23	14	0
44	0	6	23	30	38	52	11	0	11	5	0
52	0	1.5	15.5	10	10	27.5	24.5	0	24	20.5	6.5
65	0	2	36	40	41	33	14	0	4	3	3
68	0	2	20	11	18	31	6	0	8	0	0
294	0	2	17	17.75	21.75	30.75	9.75	0	6.5	2.5	0
191	0	8.5	22	21.5	33	49	20	0.5	0.5	0.5	0
53	0	1	19.5	20	18	31	8.5	1	4	7	2
63	0	1	24	25	41.5	63.5	21	0	12	4	0
51	0	2	15.5	30.5	37.5	43	9.5	1.5	0	0.5	0
54	6	6	22	27	33	32	14	0	0	0	0
	6	53.5	327	349.75	443.75	623.25	194.25	8.5	93	62	12.5

Omitted from the comparable display for H2 in the same set of pieces are *c*♯ (one time unit in 43) and *B*♭ (one time unit in 51). *b*♭ and *b*𝄳 are given separate entries, so that we have:[417]



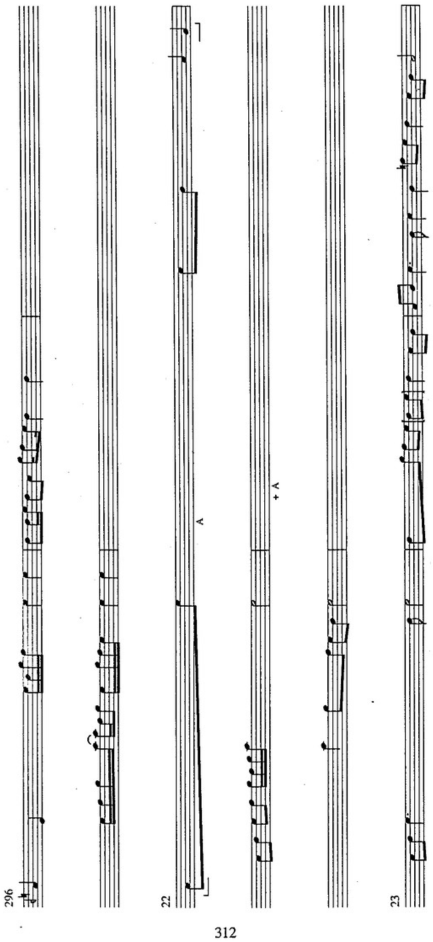
Again, *d* is by far the most salient note. But in contrast to other modes where we find a progressive decrease in salience corresponding to increasing distance from a prominent kernel, it is clear that here, especially if *f* and *f*♯ are regarded as complementary equivalents and their values summed, we can reasonably analyse the profile as consisting of two contrasting but internally consistent areas, a less important *A* - *d* tetrachord and a more important *d* - *a* pentachord within each of which there is virtually no variation (each member of the first averaging 7%, each member of the second 13%), with the salience of *d* being simply the sum of its value in each.

2.2.14 *The hüseyni group*

With hüseyni we make the final move, from a mode with prominent *d* to one with prominent *e*, thereby reaching the last of Cantemir's category of low-register main-note modes. Judged by incidence it is by far the most important of all, but the number of ancillary modes related to it is relatively small, consisting in addition to the compound hüseyni-buselik only of necit hüseyni and şuri, neither of which, as exemplified in the collection, can readily be distinguished from it.

[417] The breakdown for the individual pieces is as follows:

	G	*A*	*B*𝄳	*c*	*d*	*e*	*f*	*f*♯	*g*	*a*	*b*♭	*b*𝄳	*c'*	*d'*
231	1	3	1.5	3	7.5	4.5	4	0	5	15	2	4	3.5	2
70	1	6	3	5.5	6.5	1.5	0	8	8.5	6	2	0	0	0
43	0	6	5	7	37	20	12	3	19	25	2	2	3	2
72a	2	13	14	15	25	18	0	20	19	18	6	0	6	4
44	0	0	4	7	13	6	0	7	10	14	3	0	0	0
52	0.5	6.5	4.5	4	8.5	6	0	7.5	12.5	6	0	0	0	0
65	0	0	0	1	14	10	0	8.5	9.5	4.5	0	0.5	0	0
68	0	9	3	2.5	16.5	9	0	16	15	17	0	2	4	2
294	0	6.75	1.25	1	4.5	2.5	3.75	2	6.75	3	0.5	0	0	0
191	0	3.5	3	7	30	18.5	12.5	0	4.5	5	0	0	0	0
53	0.5	6	6.5	5	12.5	7	2	4.5	11	12	3	0	0	0
63	0	0	0	5	21	21	11	0	4	2	0	0	0	0
51	4.5	7.5	2.5	7	9.5	2.5	1	3.5	7.5	6.5	3	0	0	0
54	0	0	0	0.5	5	5.5	0	7.5	5.5	3	0	1	0	0
	9.5	67.25	48.25	70.5	210.5	132	46.25	87.5	137.75	137	21.5	9.5	16.5	10



Example 88

58. hüseyni
The following pieces are in this mode:

> 10, 11, (24), 25, 26, 28, 46-8, 73, 74, 76-80, 82-90, 164, 171-3, 184, 188, 196-8, 212, 221, 222, 224-6, 234, 267, 268, 311, 314, 316, 320, 322, 327

and it is also exemplified in 22, 23 and 296, the three külliyat compositions in which it serves as the 'home' mode. To the 49 pieces assigned to it may be added for consideration 39, nominally in 54. dügâh.

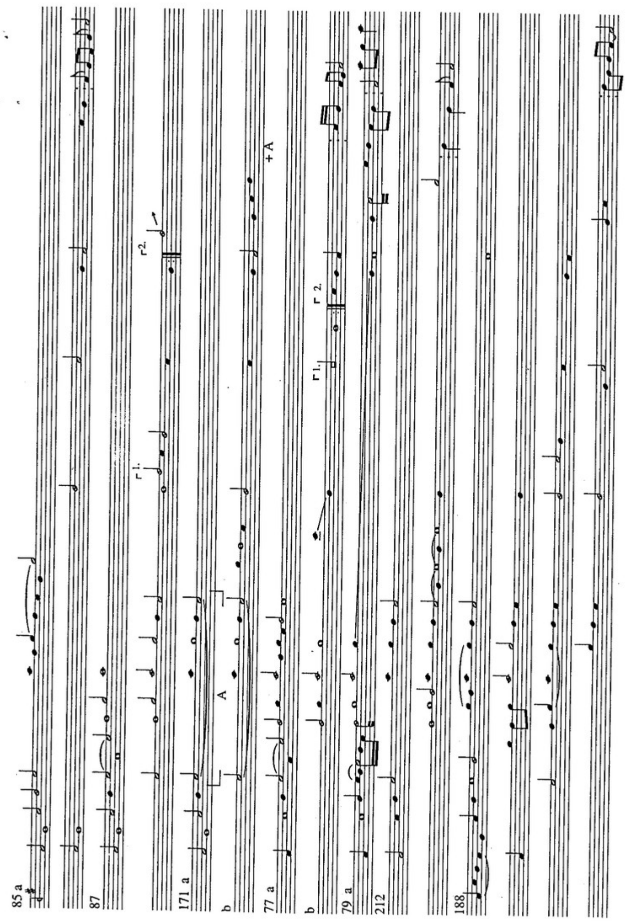
The hüseyni corpus is by far the largest in the collection, and it is consequently hardly surprising to find Cantemir begin his account (pp. 31-2) by characterizing it as particularly important: it is, he says, in one of his rare attributions of individual characteristics, both pleasure-giving and heroic, and in his opinion more august and noble than all other makams, surpassing them in glory, majesty and exalted and sublime qualities,[418] so that it is no disgrace for all the other makams and terkibs to be subordinate to it.

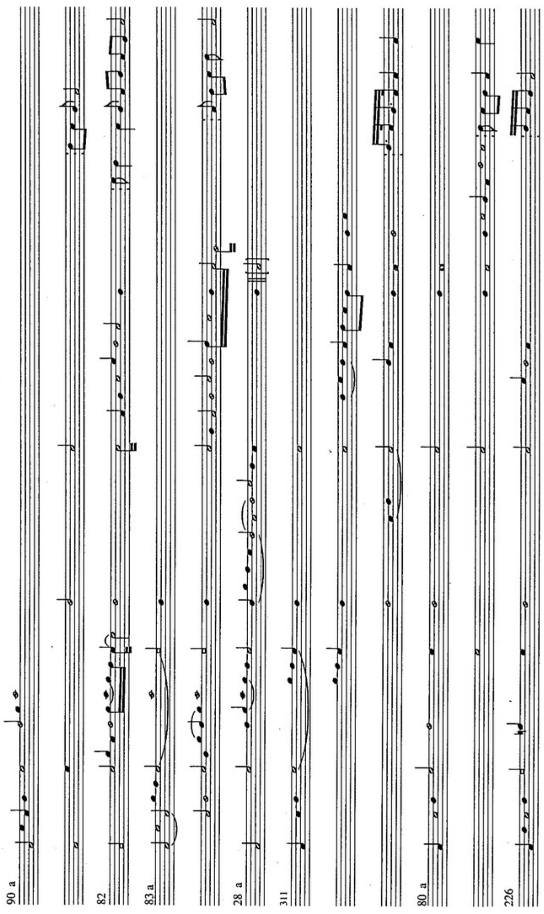
The following nuclear description defines it in terms of an ascent from initial *A* on the main notes *B𝄳 c* and *d* to *e*, followed by a descent to finalis *A*. Its range is then said to extend from *D* to *e'*. There follows a lengthy excursus mainly concerned with giving the reasons for the contrast between the importance and strength of *e* and the weakness of *E*, after which the modulatory family of hüseyni is defined as consisting of the 'used' terkib hurasani huseyni and the 'unused' terkibs 8. kuçek, vech-i hüseyni, 59. necit hüseyni and 7. şiraz.

Taking into account the degree of elasticity found in the most populous modes hitherto encountered, 40. ırak, 48. rast and 57. neva, one might expect to find here an even greater degree of variety. We may begin, accordingly, not by attempting a general description or discrimination of types on the basis of the corpus as a whole, but by considering the character of the brief samples in the külliyat pieces, especially as 296 has previously provided versions that can properly be described as exemplary, both in encapsulating some of the main features as described by Cantemir and in representing the most recent stage of development in those modes visibly undergoing a process of historical change. In 296 we have just three cycles before the first modulation is signalled (and there is no descent to finalis *A*). In 23, on the other hand, modulations are not indicated at all, while in 22 the first marginal annotation relates to Me, which is preceded by 20 cycles of material, and unless all of this is in hüseyni—theoretically possible, but most unlikely—there is no indication of where the first switch takes place. Consequently, to avoid any inadvertent inclusion of modulatory material attention has been confined arbitrarily in ex. 88 opposite (which preserves the full transcription) to H1 in both 22 and 23.

Cantemir's definitions of the initial have not always proved entirely reliable, although they sometimes correlate with the first prominent note and area of elaboration. For the exposition, accordingly, one would expect either two such areas, first around *A* and then around *e*, or an ascent from the region of *A* to a prominent and elaborated *e*, followed by a descent to finalis *A*. What we have in these three instances shows that *A* may well be initial (although it need

[418] حسینی دیدکلری مقام بر کامدان وصاحبقران تمام پرده لرك مقامیدر وبنم قیاسمده جمله سایر مقاملردن مجد اجلال ایله عزّت سمات ورفعت آیات عظمتلو وبزرکوار بر مقامدر .





Example 89

not be); but there is no hint of accompanying elaboration. Nor is there much evidence for the ascent on main notes to which he refers: a jump to *e* (direct, or via *E*) is preferred. Elaboration of *e* is almost entirely based on the *e* - *a* tetrachord, and in two pieces one may note that prominent *e* is followed by an equally lengthy elaboration of *d*, again involving the tetrachord above. In the first cycle of 22 *d* is, if anything, more prominent than *e*, thus suggesting, rather, neva, so that unless the opening rising fifth gesture is enough in itself to establish hüseyni it would seem that only at the end of the second cycle is ambiguity resolved with the minim *e*, the prominence of which is subsequently underlined by its reappearance as finalis. A descent to finalis *A* only occurs in 23, but it would nevertheless be reasonable to consider this representative.

If we turn now to the repertoire as a whole, it is clear that the külliyat represent the most frequent opening pattern: no fewer than 19 pieces ascend immediately or fairly directly from *A* to prominent *e*, and although the continuation thereafter is inevitably varied, it is also the case that several proceed beyond *e* to outline the *e* - *a* tetrachord (although not always in a way that should be construed as an elaboration of *e*). In the preceding survey in ex. 89 these have been placed first, followed by others that ascent above *e* but without exploring the whole *e* - *a* tetrachord, in the last case, indeed, rising no further than *f♯*. Only the first subsection has been given if it concludes with a cadence on *A*.[419]

It will be seen that the type of initial development seems to carry a weak implication for what follows: if the complete upper tetrachord is used the ensuing descent is generally brief, perfunctory even, whereas in the pieces which do not explore the whole tetrachord there is greater elaboration of the *A* - *e* pentachord. But there are, inevitably, exceptions: 82 and 83 develop both and, in any case, given the restriction of space on the amount of material that can be displayed, the wider context of the remainder of the exposition needs to be considered before any conclusion can be reached as to the relative importance of the different registers. The evidence of the penultimate piece, 80, would suggest the lack of any need for balance between them, for having concentrated almost exclusively on the *A* - *e* pentachord in the part illustrated it continues in exactly the same vein in what follows. In the final piece, 226, on the other hand, where H1 likewise concentrates on the *A* - *e* pentachord, we then find that after an ascent (in Ma) from *A* to *e* considerable emphasis is given (in Mb and the beginning of Mc) to the *e* - *a* tetrachord, so that the whole forms an extended arch, and in terms of distribution there is near equality between the two registers. Although the arch form is encountered elewhere, as in 90 H1b, it is rather in the latter respect that 226 can be thought of as possibly representing a norm, for alternation between registers is far more common than concentration on only one.[420] A rather different pattern is found in 28, where H1b re-emphasizes the high register, focusing around *a* (which is also the finalis), while in M there is a succession of descending subsections mostly starting from *e*;[421] but the end result is again a reasonably equal distribution over the exposition as a whole, and in the other pieces where the upper register predominates in H1 the lower similarly tends to come to the fore in M.[422]

Next come ten pieces, displayed in ex. 90, that again ascend to *e* (if not always from *A*), but then either reverse the previous order of events, developing the area below *e* before ascending above it, or simply fail to develop the area above. 173 ventures very briefly into the upper tetrachord before leaving *e*, but much more important is the extensive elaboration of *d* that follows. In the next piece, 47, the emphasis is very much on elaborating first *e* and then *d* without expanding the range beyond the notes flanking them, while in the final three there is no development of the area above *e*, elaboration of which is followed by descent.[423]

Here the initial tactics in most instances resemble those found in ex. 89, so that except in 11 and 88 we find either a gapped ascent beginning *A c*, or a leap from *A* to *e* (via *g* in the case of 47). But there is little uniformity of development thereafter: one may notice the contrast, for example, between the inclusion of ascending material after the first descent to *A* in 221 and 11 and omission in 198, 24 and 327. What uniformity there is relates, rather, to a degree of inverse symmetry, that is, more specifically, the compensatory lengthening of the amount of elaboration within the lower register that accompanies the relinquishment of the upper tetrachord in the last three pieces, so that despite the similar initial rising-falling contour the registral emphasis in 198 (where *e* and the notes above account for 37.5% of H1) is at some considerable remove from that of 88 (where the comparable figure for *A* and the notes below is 42%, and where M occupies exactly the same territory as H1). This suggests that the equilibrium in the use of upper and lower registers found in many of the pieces displayed in ex. 89 might be less characteristic here, and scrutiny of the remainder of the exposition shows that this is indeed so: in the majority of cases (198, 24, 11, 47, 316 and 88) the lower-register emphasis is sustained in what follows, where the *A* - *e* pentachord predominates.[424] There are, nevertheless, instances of high-low alternation and registral balance, most notably in 221.[425]

Among the remaining pieces—which are as many again—a variety of opening gambits is found. The next seven, presented in ex. 91, have affinities with those in ex. 89 to the extent

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[419] In 28 H1a the cadence is the initial of H1b, while in 87 H1 it is at the same time the beginning of the internal repeat: the seconda volta shifts to the upper register (*d* - *c'*), which is then developed at length, and there is no final cadence. In 171 H1 ends on *e*: the first cadence on *A* appears in Ma, which is too long to include, and in any case appears to modulate. In 79 only the seconda volta form (that is, the second of the two cycles) has been given. In 311 the second version of H1 has been preferred.

[420] Thus in 83, for example, where in H1a we have upper register material followed by lower, H1b reverts to the *e* - *a* tetrachord, while after an initial *e* - *a* jump M concentrates on the *A* - *e* pentachord; and alternation (including modulations) is particularly marked in the lengthy sequence of subsections in 82 M.

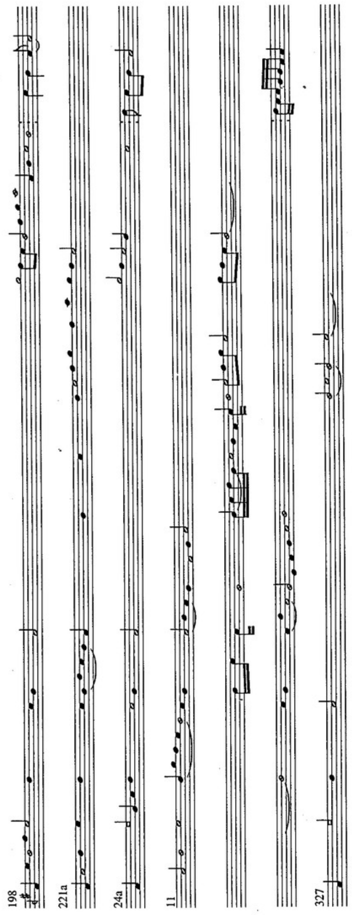
[421] Ma from *a*, Mb from *g* (suggestive, therefore, of 50. gerdaniye), Mc from *e*, with extensive initial elaboration, and Md (= Mc 4-7) also from *e* but without the initial elaboration.

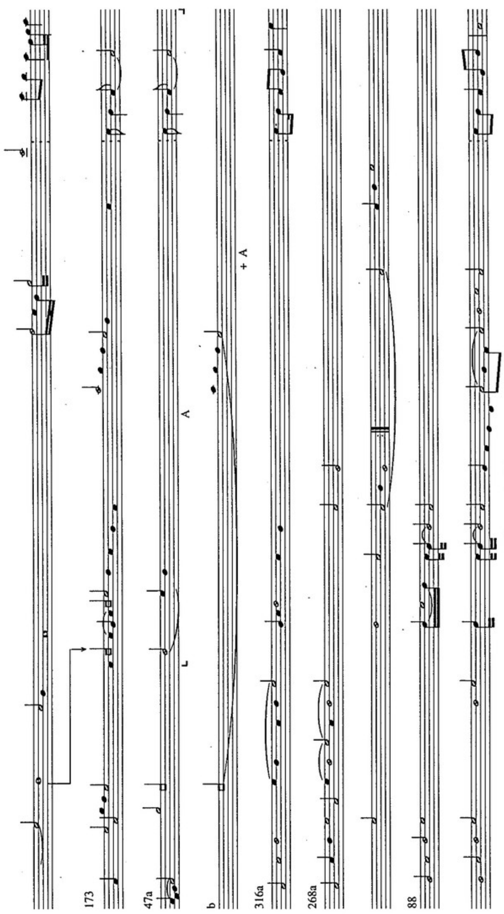
[422] 188, however, is exceptional, for Ma in particular (considered in isolation, this might well be assigned to 51. muhayyer) continues the emphasis on the upper register, while Mb also fails to relinquish it, alternating between the two.

[423] In 221 H1b has the same cadence on *e* as H1a: the first cadence on *A* appears at the end of M, which is too long to include. 327 Ma, which also contains the first cadence on *A*, is somewhat briefer, but distinctly uninformative, consisting of a descending sequence from *a*, and may likewise be omitted. Given the brevity of 47 H1a, H1b has also been included. In 268 H1b ends on *a*.

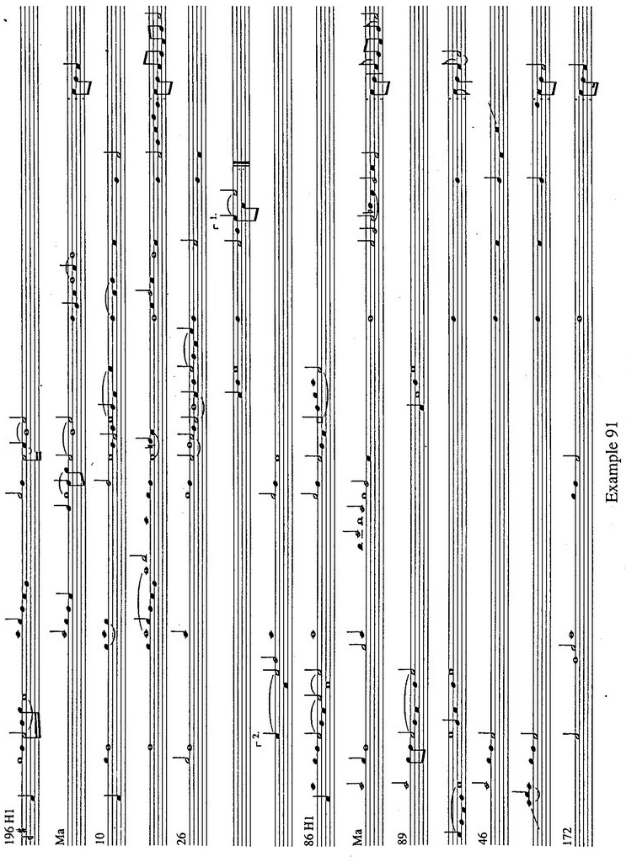
[424] 88 M even incorporates a repeat of H1 **6-12**.

[425] While other similarities occur in 327 M, which resembles 28 M somewhat, with a series of brief subsections, the first two descending from *a*, the following three from *e*, and 268, which approximates to the arch form, the predominantly low register of H1 being followed in Ma by predominantly high-register material, with a return to the *A* - *e* pentachord in Mb.





Example 90



Example 91

that they are concerned to develop first the upper *e* - *a* tetrachord. But instead of an ascent or jump from *A* to *e* they commence with *g* or *a* (which may be introduced by a jump from *A*), followed by a descent to *e*, which is then generally elaborated. The one exception is 172, which begins directly with *e*.[426] In this group we find that where the segment illustrated is predominantly in the upper register, as in 196 and 86, this will be balanced by emphasis on the lower in the remainder of the exposition.[427] In 10 and 46, on the other hand, H1 is fairly evenly balanced between the two registers, but M is not, being in both cases predominantly or exclusively in the lower, and different again is 89 Ma, which reinforces the predominantly lower-register emphasis of H1 by concentrating on the *A* - *e* pentachord.[428] In 26, finally, the bulk of the material in H1 is an elaboration of *e* lying within the *c* - *g* range, so that it would be inappropriate to attempt to distinguish between upper and lower registers. In M, however, the range expands to *F♯* - *c′*, and there is a fairly clear division between a high first half and a low second one.

Presented in ex. 92 are a further six pieces that begin, like 172 in the preceding group, on *e* (or, in the case of 320, *d*), but differ in not immediately proceeding to explore the upper register: rather, they are concerned to develop first the *A* - *e* pentachord.[429] It is with these that 39, nominally in dügâh, most obviously aligns itself, its opening gesture being, indeed, identical with that of 234.

This group thus has affinities with that presented in ex. 90, and although it shows a greater tendency to elaborate *e* before descending to *A*—possibly to be viewed as compensation for the omission of the initial ascent—and thereafter provides fewer examples of an upward jump rather than an ascent, the similarities outweigh the differences, and both groups contain pieces that either fail to venture into the upper register or do so in a brief and perfunctory manner. Here, indeed, the majority fall into this category, and the question arises of whether it might figure more prominently in the remainder of the exposition. The answer for 48 and 314 is clearly in the negative, so that although in the other pieces the upper register is adequately represented[430] it cannot be claimed on the evidence of this group that registral balance, however common, is an essential feature of hüseyni.

In fact, it is not wholly clear which features can be deemed essential. The material displayed in ex. 89 corresponds reasonably well to the tripartite division of the initial exposition found in so many of the less common modes (which consists, essentially, of an ascent to a prominent note initiating a zone of elaboration which may explore the areas above

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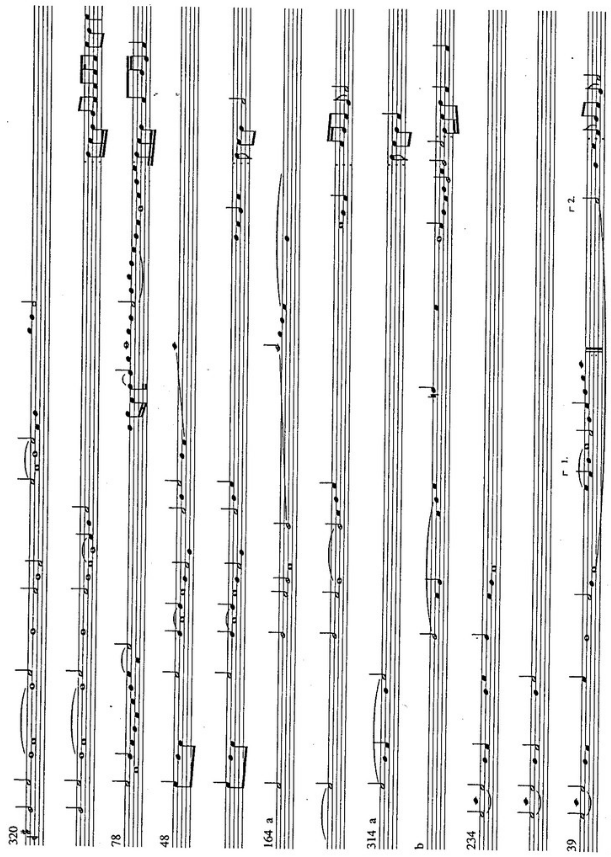
[426] In 196 the first full cadence occurs in Mc, but for present purposes that in Ma may serve. Similarly, in 172 the first full cadence occurs in H1b, but for present purposes that in H1a may serve. In 26 the first cadence on *A* appears at the end of M, which is too long to include.

[427] Such is also the case in 172 M (which at the same time modulates as, partially, does 86).

[428] However, a degree of balance is provided by Mb, which can be viewed as an extended (or double) arch form, jumping from the initial *A* - *e* pentachord to *a*, with the following contour being $a \rightarrow e \rightarrow A \rightarrow D \rightarrow A$ + cadence (itself a smaller arch with the contour $A \rightarrow e \rightarrow A$). At the same time it can be considered an expansion of H1, the contour of which is $a \rightarrow e \rightarrow A$ + cadence ($A \rightarrow e \rightarrow A$).

[429] Given the brevity of 314 H1a, H1b has also been included. In 234 the only cadence on *A* occurs in H3c: like H1, both subsections of M cadence on *e*.

[430] Specifically in 320 Mb, 164 H1c and M, and 234 Ma, as well as generally in 78 M.



Example 92

and/or below followed by a descent to the finalis, normally with cadential elaboration) and one might, accordingly, propose for hüseyni a basic arch form (with square brackets enclosing the limits of a zone):

$$A \rightarrow e\ (+\ \text{elaboration}\ [e\text{-}a]) \rightarrow A\ (\pm\ \text{cadence})$$

However, reference to ex. 90 suggests abandoning the extension of the arch to a, and (without indicating which parts might be recursive) the adoption of some such formulation as:

$$A \rightarrow e\ (\pm\ \text{elaboration}) \rightarrow d\ (\pm\ \text{elaboration}) \rightarrow A\ (\rightarrow [e\text{-}a] \rightarrow A)\ (\pm\ \text{cadence})$$

while for the material in ex. 91 a rather more complex statement would be required, supplying a series of alternatives to the initial move and reinstating the upper tetrachord after e:

$$(A/Aa/Ag/a/g \rightarrow)\ e\ (\pm\ \text{elaboration})\ (\rightarrow a \rightarrow e) \rightarrow d\ (\pm\ \text{elaboration}) \rightarrow A\ (\pm\ \text{cadence})$$

The only common elements are, therefore:

$$e\ (\pm\ \text{elaboration}) \rightarrow A\ (\pm\ \text{cadence})$$ [431]

and these would again be included in any comparable formulation devised to account for the material displayed in ex. 92. Although this appears disappointingly meagre as an encapsulation of fundamental characteristics or, more accurately, as a definition of the irreducible kernel which will always occur in combination with a number of optional elements, reference to the other main-note modes shows that it is still adequate to differentiate hüseyni from them. But however modest such a common factor, reference to the remaining pieces assigned to hüseyni suggests that even this may have to be relinquished.

We may consider first a group of six, presented in ex. 93, all of which have initial A (or, in the case of 322, G) but instead of ascending to e begin by exploring the area around and below A.[432] It is true that in all of these something corresponding to the e (± elaboration) $\rightarrow A$ (± cadence) kernel can be located, and by comparison with the pieces examined above it could be said that in 224 and 184 its onset is merely delayed somewhat, so that given that there is virtually no elaboration or additional cadence material it follows that the initial elaboration of A should be added to the stock of significant but optional elements one or more of which will normally be added to the kernel (and it may be noted in this connexion that by their stress on the low register around A all these pieces illustrate the alternative pattern of initial emphasis implied by Cantemir's description). In 84 the delay is somewhat greater, the kernel being introduced halfway through, while in 322 it does not appear until the fifth of the six cycles; but the real problems arise in 225 and 197, for here e occupies in each a total of just one time unit, and moreover one that does not occupy a prominent node, so that identification, let alone the probative value, of the kernel is questionable. In these cases it would perhaps be more accurate to speak of a reduced form (if in 184 preceded and hence prepared by the characteristic gapped *A c d e* ascent), a pale reflection that serves merely to reinforce a modal

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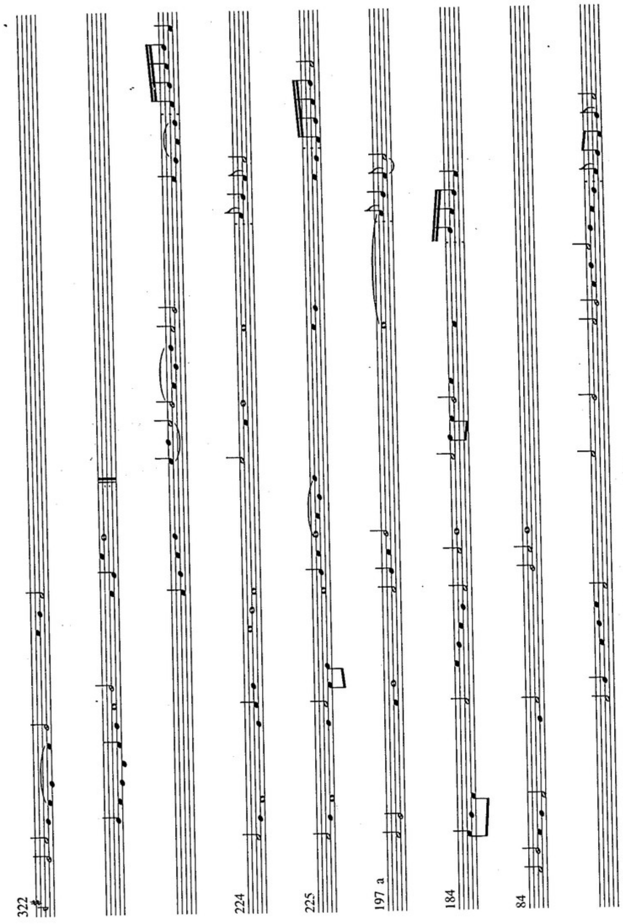
[431] With the further qualification that the cadence material might have as finalis not A but e or a.

[432] In 84 prominence has been marked on the basis of 84a: preference for 84b would result in the systematic omission of every second indication of prominence.



Example 93

identity already established by the elaboration of A, for it may again be noted that in initial position this material is itself adequate to differentiate hüseyni from the other main-note modes. Only 55. uşşak (which, it may be argued, should not really be considered a main-note mode) begins in the same area but, as reference to ex. 81 will confirm, it is characterized by a somewhat different trajectory.[433] That of hüseyni, with its underlying $A \rightarrow F\sharp \rightarrow A \rightarrow d$ movement, is reminiscent, rather, of the post-initial development of 40. ırak (cf. ex. 60), and is thus modally distinct not because of its intrinsic melodic character but by virtue of its position.

Given the initially low emphasis of these pieces, it might be expected that here, more than elsewhere, compensation would be sought by a subsequent shift to the higher register. But just as registral balance could not be established elsewhere as an indispensible element of modal structure, here too it proves elusive, even if 84 provides a perfect example, beginning both Ma and Mc with development of the e - a tetrachord. The high register is also encountered in 197 H1b and in 225 M, but these are of only limited relevance, despite the expected contrast they embody, for both modulate,[434] and in 322 M and 224 M, which remain resolutely in hüseyni, we encounter only a much more modest shift, merely relinquishing the area below A and concentrating on the A - e pentachord (with fleeting forays into the upper register in 224 Ma and Mc). Similar forays occur in 184 M, but here the emphasis is even more firmly on the lower register,[435] and overall it may be noted in this piece that pitches above e, which occupied just 3% of H1, still occupy no more that 4% of M.

There remain six other pieces assigned to hüseyni: 25, 73, 74, 76, 222 and 267, all of which, when set against whatever norms may be derived from the remainder of the corpus, are anomalous. Considered in isolation, one would have no hesitation in identifying 222 H1 as in muhayyer: it bears strong similarities to H1 in both 223 (and the juxtaposition of these two pieces can hardly be fortuitous) and 21 (cf. ex. 78). Setting 222 aside, the initial expositions of the remainder are presented in ex. 94.

Striking, here, is the general failure to establish e as (at least) equal in prominence to A. The opening A - e fifth of 76 may well be in itself a sufficient marker of hüseyni, but in 25, 73 and 267 the emphasis is very much on the move from A to a, and e either recedes into insignificance or, indeed, as in 267, fails to appear at all: in none of these pieces do we find the previously ubiquitous e (± elaboration) $\rightarrow A$ (± cadence) kernel and, 74 apart, it would be reasonable to regard them as related to the previous group, but consisting now exclusively of elaborations of the area around A, the prominence of which is reinforced by the initial gesture of the jump or rapid ascent to a. They present, on this interpretation, an extreme case of delay to the normal entry of e, which one would, accordingly, expect to figure prominently in

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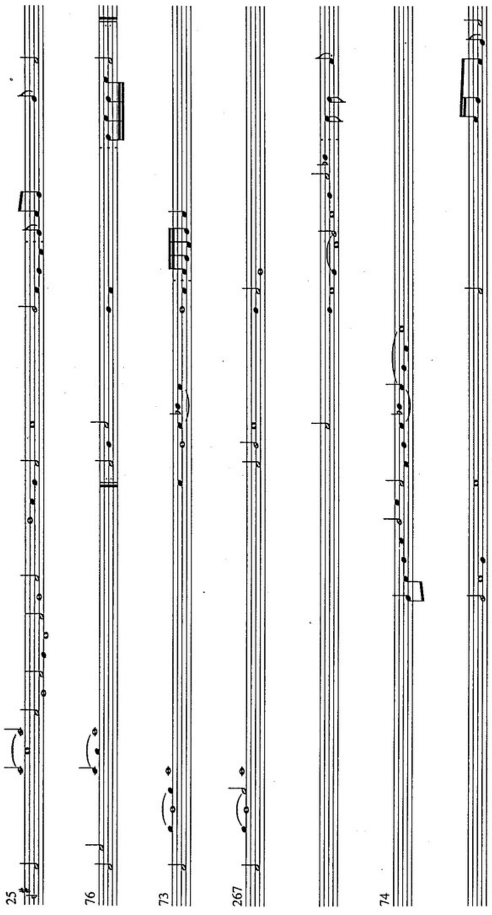
[433] The one piece that bears more than a passing resemblance to uşşak is 322, where it would be reasonable to speak of modal ambiguity sustained until the late introduction of $f\sharp$.

[434] The former bears all the hallmarks of muhayyer. It is followed in H1c by a further modulation which at the same time returns to the lower register. (In M hüseyni is fully restored, but despite an early excursion into the e - a tetrachord is predominantly based on the A - e pentachord.) The latter fails to establish e and uses throughtout f and $b\flat$, thus pointing to 35. acem.

[435] This is the one piece where in two of its six subsections M further develops the E - A tetrachord (these cadence on E and are presumably to be classified as modulations into 20. nühüft).



Example 94

the remainder of the exposition, and such is, indeed, the case in 25 M[436] and, more immediately, 267, where Ma announces hüseyni quite unequivocally by beginning with the common gapped ascent *A c d e*, and could, indeed, readily be mapped onto ex. 89. In 76, however, despite Ma beginning with what promises to be a standard *a* → *e* descent, *e* is, again, never established as prominent,[437] so that it is only with the final suggestion in Mc of a descending *e c A* triad that M is identified as in hüseyni rather than neva, as would have been suggested by the somewhat greater prominence of *d*.[438] It is the same descending triad, introduced at a much earlier stage, that seems to be crucial in defining the identity of 74, for it otherwise appears modally unfocused, with a beginning that shifts over shared territory and suggests yet another instance of overlap.[439] The normally salient *e* is given no positional prominence, occupying indeed only one and a half of the 32 time units. Nor is hüseyni established any more firmly in what follows: taken by themselves M **1-6** would surely be assigned to neva, as is confirmed by the comparison, made in ex. 95, with passages in 65 and 191, and the remainder consists of a repetition of H1, so that if the triadic descent is ignored the reprise can only be said to emphasize modal indeterminacy.[440]

The conclusion appears to be that although the *e* (± elaboration) → *A* (± cadence) kernel is by far the most common marker of hüseyni, it is not obligatory, and that in its absence (or pending its delayed appearance) there are a number of other features that serve as sufficient means of identification. It may be recalled that with the exception of muhayyer, which begins by emphasizing the upper register, there is no other main-note mode in which *e* is prominent, so that even though there might be extensive passages overlapping with other modes, just the initial gesture of an *A* - *e* jump or the inclusion of the descending *e c A* triad (unless inflected in a particular manner associated with, say, saba) would point quite explicitly towards hüseyni, as also would elaboration of *A*, with emphasis on the tetrachord below, as long as it avoided the trajectory characteristic of uşşak. Registral balance (irrespective of the order in which material is introduced), while common, is not a uniform feature, and therefore not crucial: it is just as possible for the exposition to remain firmly based on the *A* - *e* pentachord throughout as it is for it to make extensive use of the *e* - *a* tetrachord.

Accordingly, quite apart from the variety that might be predicted simply because of the size of the corpus, the different strategies adopted in the exposition suggest that no single pattern will predominate in H2. There is, nevertheless, fairly uniform adherence to the normal principle of shifting the focus up to a higher register. In those pieces where the

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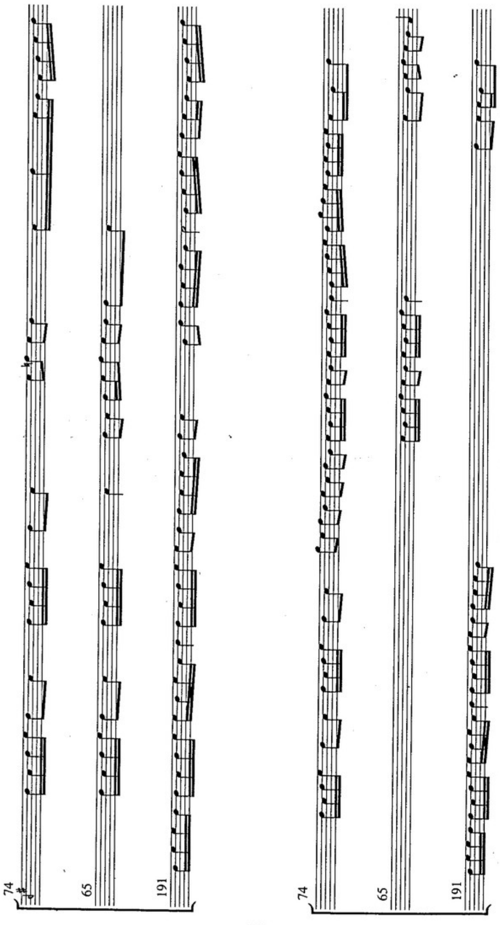
[436] But only after the further postponement of H1b, which begins by foregrounding *e*, only to identify itself thereafter as a modulation into 18. hisar which is followed by another into 25. saba).

[437] Reference to the time units considered positionally prominent in çenber shows that of the 21 such nodes in H1 and M *e* occupies only three.

[438] Rather similar is 73 where, again, Ma begins from *a* but, despite extensive elaboration of the upper register, fails to establish *e*. However, matters become clearer in Mb, where the gapped ascent *A c d e* leads to prominent *e*, and there is the same final descending *e c A* triad.

[439] Thus H1 **1**, despite ascending to e, could as readily be in rast or, perhaps, neva (cf. 231); **2** suggests a switch to saba (something that is relatively common in hüseyni, as witness 73 H1, 85 H1b, 86 M, 164 M and 172 Ma, but usually reserved until just before the final cadence), and **3-4** suggest rast or uşşak, the cadence conforming with the latter.

[440] Another clear case of overlap occurs in 46 M, which is virtually identical with 45 M, in neva.



Example 95

exposition is predominantly low such a shift is, indeed, rather difficult to avoid and, as reference to some of the pieces considered in ex. 92 may demonstrate, duly occurs. The most extreme case of a uniformly low-register exposition is presented by 194, and here H2 ascends to *a*, with *f♯* also prominent (and suggesting a temporary modulation into 44. eviç). In 322 H2a and 224 H2 the highest pitch is *d'*, providing a clear contrast with M, where it is, respectively, *g* and *a*; and in 197 H2 begins by repeating H1b 1-3, the one preceding high-register passage, and continues to concentrate on the *a* - *c'* segment before approaching the cadential descent. Elsewhere, where high-register material not only occurs consistently in the exposition but may also be quite extensive, the normal approach in H2 is either to extend the range even further upwards and/or to remain, prior to a possible final descent to *A*, almost exclusively within the *d* - *d'* octave.[441] But of greater interest is the question of whether any particular trends can be discerned in the way the upper register is developed in H2, and here the corpus divides into three main groups: one contains material bearing a broad family relationship to muhayyer, another gives prominence to the *d f♯ a* triad, and in the third *f♯* is relinquished in favour of *f* and *b♭* replaces *b𝄳*, suggesting, therefore, a standard modulation.

Of them, the first is the largest but at the same time the most difficult to categorize in any but the most general terms of register (essentially the *d* - *d'* octave) and prominence (a considerable proportion of the material being definable as an elaboration of *a*). Nevertheless, there are ten pieces, presented in ex. 96, in which the characteristic muhayyer contour *g c' b𝄳 a* appears, and although it is sometimes medial (as in 10, 11, 76 and 173), sometimes final (as in 84 H2a, 171 H2a and 322) and sometimes initial (as in 73, 172 H2b and 327), it is also evident that there are considerable similarities elsewhere in these (sub)sections, with what precedes the muhayyer motif frequently forming (all or part of) an *f♯* → *a* → *d* contour, and what follows normally consisting of a further descent (if to various destinations). Reference to ex. 78 shows that this particular configuration is not encountered in the exposition of muhayyer itself, where the motif is initial and normally followed by a descent to *d*, and this suggests that we are not faced here with a straightforward modulation or move into an area of overlap, despite the evidently close relationship between hüseyni and muhayyer, but rather with a reordering of common elements in a way that is sufficiently consistent to be distinctive.

Among the many other pieces where H2 occupies the same range as muhayyer and tends to give similar prominence to *a* some, as is only to be expected, share certain features with the above ten (and a case could be made for including 90 and 311 along with them in ex. 96). It is important to recognize, however, that it is not possible to detect within this broader group the patterns of development displayed there or, indeed, any clear pattern at all, so that the safest conclusion is the rather lame one that once the modal identity of hüseyni had been established in the exposition considerable latitude was permissible in the subsequent use of the high register, an area that tended, accordingly, to be modally somewhat indeterminate, only being clearly steered in a certain direction when it threatened to drift into muhayyer.

A feature noted in a number of other modes is a tendency for patterns of prominence in

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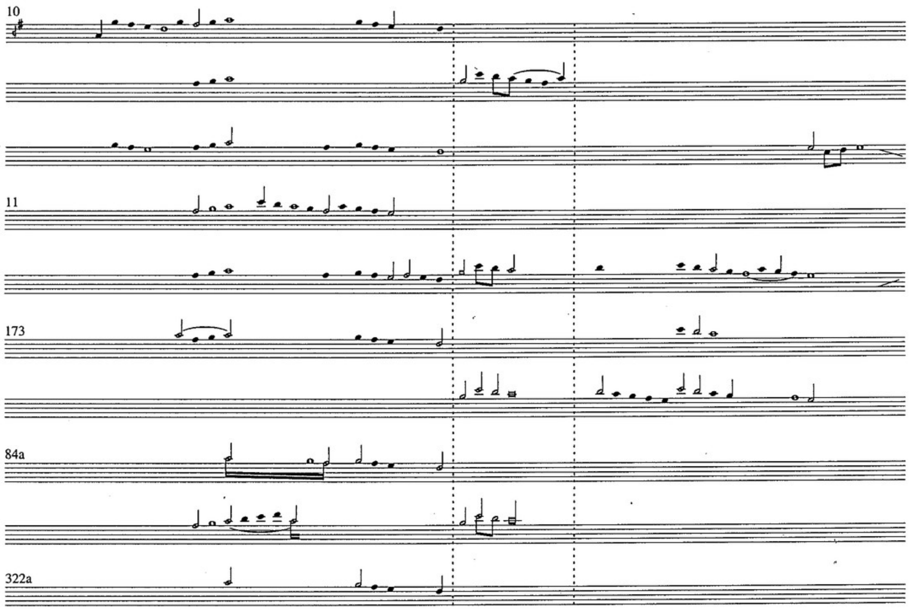
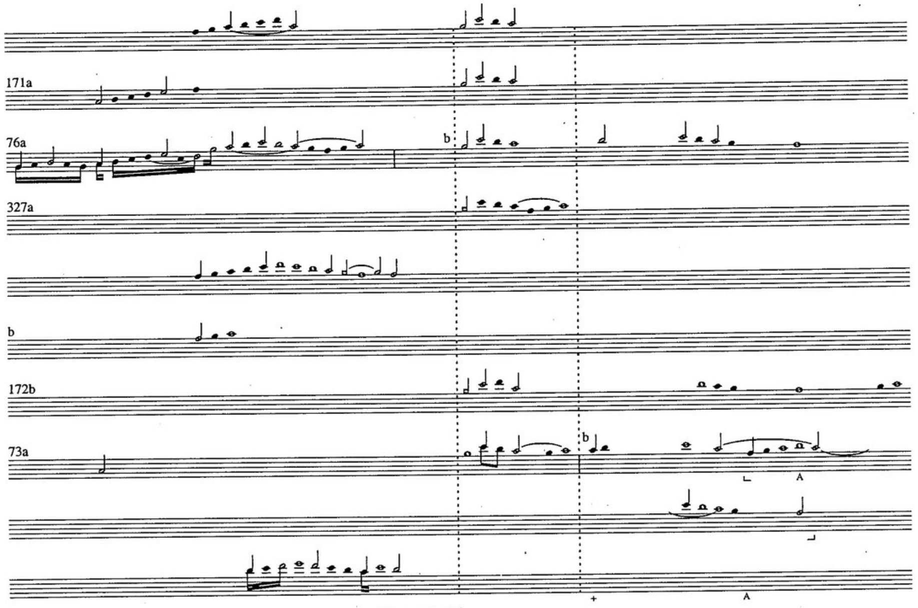
[441] To take a few random examples, in 77 the range of the exposition is *G* - *c'* and that of H2 *A* - *e'*, while in 85 we have, respectively, *G* - *b𝄳* and *d* - *d'*, and in 82 *G* - *a* and *c* - *d'*.





Example 96

the upper register to produce a chain of thirds. Given the general prominence of *a*, it might be supposed that in hüseyni examples would be found of the chain *d f♯ a c′*, especially as the material assembled in ex. 96 does in fact accord some prominence to the other three notes, and there are, indeed, a number of pieces in which *d*, *f♯* and *a* outweigh *e* and *g* in importance in all or part of H2,[442] although in none of them is comparable importance attached to *c′*. However, despite the common thread of triadic prominence in these (sub)sections, there is no particular melodic contour or motif they have in common that might be deemed to confer on them a specific modal identity.[443]

With the last group, on the other hand, to which belong 26, 89, 225 H2b, 320 and 322 H2b, the presumption must be that the systematic change of pitch set represents something more fundamental than the occasional substitution of *f* for *f♯* encountered during the exposition, where it is largely confined to the expected environment of an *e f e* flexure (or, on occasion, the formulaic *d f e d* elaboration of *d*). But, as before, there are no other features held in common that might point, in parallel to the corresponding H2 group in neva, to a shared modal identity: prominence is accorded variably to *e*, *f*, *g* and *a*; the highest pitch is, respectively, *a*, *b♭*, *a*, *g* and *b♭*; and various cadences occur.[444]

Inevitably, given the size of the corpus, modulations, particularly in H3, are numerous and varied. In clear contrast to its absence from neva, the hicaz family is particularly well represented,[445] and also common is the expected move, given the shared importance of the *A c e* triad, into saba.[446] One might also have anticipated a preference for 27. buselik and 18. hisar, in both of which *e* is prominent, but while there are a few instances of the latter[447] the former is extremely rare, suggesting, oddly, that modal contrasts involving alterations to the more prominent notes *c* and *d* were preferred to those involving the less prominent *B𝄳*.[448]

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[442] Including 25, 46 H2a, 79, 85, 184 (where a modulation into eviç may also be involved), 196 and 234.

[443] The same emphasis can also be found beyond the confines of H2: in 79 H1b and H3b, 26 H3a and, most clearly of all, 86 H3, the one place where the *d f♯ a c′* chain is incontestibly present. 212 H2 also has triadic emphasis, but this time with *e a c′*.

[444] The expected *A* appears in 89, 320 and 322b (preceded in 320, incidentally, by *B♭*). But 26 ends on *g*, 225 H2b on *d*, and the *prima volta* of 320 H2a on *e*.

[445] We find 30. hicaz in 76 H3a, 80 H3, the latter part of 83 H3b, 172 H3a, b, 197 H3a and 224 H3a; zirgüleli hicaz in 89 H3, 184 H3 (with 1-4 also constituting 90 H3a), 212 H3a and 322 H3a; 31. uzzal in 82 H3a and 320 H3; 33. şehnaz in 24 H3 b, c, 47 H3a, 78 H2a, 79 H3a, 82 H3b, c, 84 H2c, 197 H3b, 222 H3, 224 H3b and 267 H3b; and 32. zengüle in 46 H3a. In addition to the occasional juxtapositions between subsections there are also instances of juxtaposition or combination within a (sub)section: hicaz + zengüle in 316 H3, hicaz + şehnaz in 268 H3a, hicaz + uzzal in 267 H3a, zirgüleli hicaz + uzzal in 25 H3, şehnaz + hicaz in 76 H3b, c, şehnaz + uzzal in 84 H2d, uzzal + hicaz in 24 H3a and 196 H3, uzzal + şehnaz in 198 H3. One may further note şehnaz + saba in 197 H3c. Less readily identifiable modulations involving pitch-set alterations are 172 H3c (?şehnaz + *b♭*), 212 H3b (?şehnaz +*g*), 314 H3b (?zengüle + *B♭*).

[446] Which appears in 24 H3d, 46 H2b (also in the upper octave), 90 H3c, 164 H2, H3b, c (with extensive use in the upper octave), 184 H2d and 314 H3a (with finalis *c*).

[447] It appears in 173 H3, 184 H2e 1-2, 78 H2b and c (in the latter being followed by kuçek) and 25 H1b (where it is followed by saba).

[448] A lengthy and full development of buselik does, however, appear in 78 H3 (by itself H3a might be identified as 60. hüseyni-buselik). Also to be noted is 26 H3b, possibly to be identified with 28. buselik aşirani or 29. huzi aşiran, but using *f* rather than *f♯*, and with an unusual *F♯ G♯ E* cadence.

Also to be noted is that in addition to sundry other modulations into unsurprising areas[449] there are a few occurrences of unusual and hitherto undefined modal entities.[450] (An attempt to survey these and other such rare terkibs encountered elsewhere will be made in 2.2.15.)

Particularly extensive modulations are found in 78 and 225. In the former, Mc prefigures the role of H2 by ascending to the highest register, only to be imitated by H2a, but with the mode now şehnaz, while H2b shifts internally to hisar and H2c from hisar to kuçek, to be followed in H3 by buselik. In the latter, modulation begins in Mb, largely in acem; H2a starts in an unusually low register and has a modally somewhat indeterminate trajectory (*E* → *G* → *A* → *F♯* → *A* → *e*); H2b is relatable to acem (or to buselik transposed to *d*); H2c, which begins by transposing H2b down a fifth, is in nihavent; and H3 is in çargâh: one might almost class these pieces, like 30, as intermediate between a standard peşrev and the constantly modulating külliyat form.

Given the wide variety of types of exposition distinguished above the following display of relative duration does not, as with rast, provide separate profiles but follows the neva pattern of taking an arbitrary selection of pieces from each type in order to give a representative cross-section. Not included are the teslim in 198 (which repeats Ma), the seconda volta of 327 Mf, the second terkib-i intikal in 322, and 25 H1b, which modulates. *d′* (one time unit in 79 and a half time unit in 327) is omitted. *F𝄲* and *d♭* are subsumed under *F♯* and *d* respectively, so that we have:[451]

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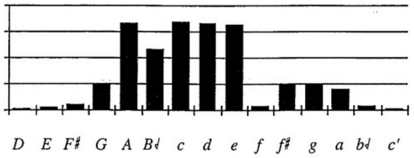
[449] Even if not all can be identified securely, especially where there is no change of pitch set. Perhaps the most frequently occurring modes are 35. acem, which appears in 74 H3a, 171 H3a, 226 H3a and 234 H3, and 44. eviç, which appears in 28 H3b, 184 H2b, c and 224 H3c. Others include 23. mahur, alluded to in 83 H2a and extensively developed in 87 H3; 57. neva, in 164 H3a and 327 H3a (although in the latter 26. beyati is a possible alternative identification); 14. çargâh, in 84 H3b and 225 H3; 45. segâh, in 171 H3b; 46. maye, in 171 H3c; 17. nihavent, in 225 H2c; 21. sünbüle, in 48 H3b; and 50. gerdaniye in 221 H3b. Less certain identifications are 20. nühüft, in 184 Mb, c; and 55. uşşak, in 188 H3 and, possibly, 311 H3a.

[450] In addition to those mentioned in note 445 there are 84 H3c and the quite similar 171 H3d; and 47 H3b, 90 H3b and 322 H3b, which are not so much similar as virtually identical, despite not all being at the same pitch level.

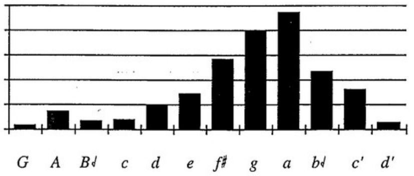
[451] The breakdown for the individual pieces is as follows:

	D	*E*	*F♯*	*G*	*A*	*B𝄳*	*c*	*d*	*e*	*f*	*f♯*	*g*	*a*	*b𝄳*	*c′*
85	0	0	4	13	63	34.5	57	47.5	33	0	17	12	6	1	0
79	0	0	0	6	43	39	45.5	64.5	69	3	30	37	33	10	3
82	0	0	0	6	37	22	31	30	44	1	10	8	3	0	0
80	0	0	0	4	32.5	25	26.5	27	21	0	4	4	0	0	0
198	0	0	0	0	22	16	33	30	29	0	8	4	2	0	0
327	0	0	0.5	5	31	18.5	30	34	59	4	18.5	19	15.5	2.5	2
268	0	0	0	42	81	54	91	76	63	6	16	16	47	16	2
196	0	0	1	20	28	22	40	34	26	1	10.5	13	4.5	0	0
89	4	2	9.5	29.5	71	43	64	58.5	62.5	6	13.5	18	9.5	1	0
320	0	0	0	2	35	19	44	68	98	6	34	40	18	0	0
314	0	0	2	12	28	23.5	34	32	22	2.5	2	1.5	0.5	0	0
322	1	2	5.5	14.5	31.5	27	25.5	21	9	0	2	1	0	0	0
184	1	10	7.5	16	39.5	27.5	27	29	19.5	0	3.5	2.5	1	0	0
25	4	3	11	22.5	69	58	71.5	68	59	0	14	14	14	0	0
74	0	0	0	10	25.5	15	26.5	22	11	1	1.5	1.5	0	0	0
	10	17	41	192	637	447	646	641.5	625	30.5	192.5	191.5	154	30.5	7



Thus although the *A* - *e* pentachord, as expected, is signalled as by far the most significant element, the percentages within it fluctuate somewhat, with *B𝄳* relatively weak and *c* and *d*, rather than *e*, emerging as slightly more salient than the remainder.

H2, it has been suggested, can be divided into three groups, one modally coherent in the sense that it exhibits common melodic features, one sharing the same pitch set but not the same melodic characteristics, and one with a different pitch set. There would be little point in presenting a display of relative duration for the third group, as this would merely disguise marked internal differences. That for the first group omits *G* (three time units in 76) and *e'* (two time units in 73), so that we have:[452]



That for the second group includes 85 Z, but omits the prima volta of 79 H2b and 320 H2b and the seconda volta of 320 H2a. *B♭* is subsumed under *B𝄳* and *b* (one time unit in 198)

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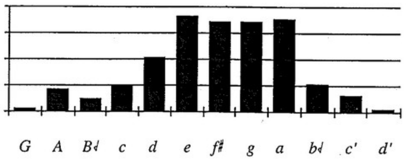
[452] The breakdown for the individual pieces is as follows:

	G	*A*	*B𝄳*	*c*	*d*	*e*	*f♯*	*g*	*a*	*b𝄳*	*c'*	*d'*
10	2	12	6	6	14	13	10.5	12.5	9	2	1	0
11	0	0	0	0	3	15	19	21	19	7	4	0
173	0	0	0	0	2	6.5	4.5	8.5	19	13.5	6	0
84a	0	0	0	0	2	1	11	17	19	8	5	1
322	0	0	0	0	1.5	1	4	6.5	9	3	2	1
171	1	3	1	1	2	3	1	5	7	1	3	0
327	0	0	0	0	0	1.5	14.5	18.5	10.5	4	4.5	2.5
76	3	4.5	4.5	5.5	5	2.5	5	11	13.5	8.5	8	1
172	0	0	0	0	0	0	4	9	9	3	2	1
73	0	2	0	0	0	0	11.5	10	27	21.5	13	3
	6	21.5	11.5	12.5	29.5	43.5	85	119	142	71.5	48.5	9.5

under *c'*, so that we have:[453]



It is clear from the breakdown that this profile smooths out internal variations that are occasionally quite marked, but there is hardly a single piece that, taken individually, would produce results very similar to those shown in the profile for the first group. The net result is certainly quite different: here virtually identical percentages appear over the core *e* - *a* tetrachord, and there is nothing comparable to the salience of *a* in the previous profile. The contrast between the two thus tends to underline the argument for coherence and a specific modal identity shared by the pieces in the first group.

There remain to be considered the other and rather marginal modes associated with hüseyni, but before turning to these we may revert briefly to 39, the heading for which is dügâh. As noted, the piece is resolutely in hüseyni: it is so entered by Cantemir in the index; the exposition fits perfectly in ex. 92 (as would also H3), and H2a and b explore the upper register in a quite orthodox manner. However the relationship was conceived, it thus seems clear that as a modal designation the term dügâh was associated not with uşşak, as Cantemir's discussion of 54. dügâh might imply, but with hüseyni, and confirmation that such was the case is supplied by ʻAlī Ufḳī, who gives 316, the piece he places first in his hüseyni section, and one no less typical, the heading dügâh-hüseyni.[454]

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[453] The breakdown for the individual pieces is as follows:

	G	*A*	*B𝄳*	*c*	*d*	*e*	*f♯*	*g*	*a*	*b𝄳*	*c'*	*d'*
25	1	12	3	6	16	14	17	15	12	0	0	0
47	0	6	5	10	9	12	15	15	16	5	3	0
79	2	8	6	6	10	11	10	12	15.5	8.5	4.5	2.5
80	0	1	0	0	1	11	13	13	7	2	0	0
82	0	0	0	4	11	13	16	18	19	9	4	2
85	1	5	3	3	18	22	22	25	51	16	17	1
184	0	1	0	0	3	6	18.5	6.5	11.5	1.5	0	0
196	0	1	0	0	4	9	17	18	13	2	0	0
198	0	1	0	0	2	13	11	9	8	3	1	0
222	0	5	4.5	10	12.5	10.5	8	10.5	3	0	0	0
268	0	0	0	6	10	38.5	7	7.5	3	0	0	0
314	0	0	0	0	3	17	11.5	17.5	11.5	3	0.5	0
	4	40	21.5	45	99.5	177	166	167	170.5	50	30	5.5

[454] Cf. the discussion in Feldman, op. cit., pp. 346-8, where there is also a transcription of ʻAlī Ufḳī's version. This compound designation is in fact rather unusual for, as Feldman observes, it is not attested in the surviving theoretical literature, where such terminology abounds.

59. necit hüseyni

Mentioned by Cantemir only as one of the 'unused' terkibs in the modulatory family of hüseyni, there is no description of this mode,[455] nor is it identified by name anywhere in the three külliyat pieces. As exemplified in the one piece in which it occurs, 325, it is not immediately apparent in what way it was felt to be different from hüseyni, for the exposition as a whole lies almost entirely within the *A* - *e* pentachord, with *A* prominent in H1 and *e* in Ma and b. It therefore aligns itself in H1 with the group displayed in ex. 90. The lowest pitch used is *G*, and as *e* is not clearly marked as prominent in the initial stages the melodic profile of H1 seems to resemble somewhat that of 55. uşşak, and one might, accordingly, speculate that its modal identity was defined by this ambiguity. A case could also be made for arguing, in the absence from the whole exposition of any development of either the *e* - *a* tetrachord or the lower register below *A*, that it is precisely the concentration on the *A* - *e* pentachord to the exclusion of all else that is likely to have been the reason for its being recognized as a separate subtype, especially when a result of the melody failing to rise above *e*[456] is that measured purely in terms of relative duration *d* is far more salient than *e*.[457] But whatever interpretation is proposed, nothing thereafter indicates a departure from the norms of hüseyni, despite the slightly unexpected *(d c♯) d* cadence of H2a and the inclusion of a further *c♯* in H3b.

60. hüseyni-buselik

Cited nowhere in the *edvār*, this particular combination is offered as a marginal annotation to 22 H2b, which is confined to the *A* - *e* pentachord, has initial and prominent *e* and descends to finalis *A*, but (from the perspective of hüseyni) substitutes *B* for *B𝄳*. If this was still recognized at all as a separate terkib by Cantemir and his contemporaries it can only have enjoyed the most precarious of existences, uncomfortably squeezed between 38. acem-buselik and 27. buselik proper. There is, nevertheless, one subsection that exhibits exactly the same characteristics, 78 H3a, although as the following subsection explores the upper register it would be equally possible (thereby underlining the marginality of hüseyni-buselik) to interpret 78 H3 as a whole as being in buselik, in which case H3a would be the provider of the lower-register exposition. Further possible instances are 91 H2, which begins with repeated *e f e* flexures but thereafter remains within the *A* - *e* pentachord, and the first but still extensive part of 140 H3c, where the range is essentially *G* - *g*, *f* appears to the exclusion

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[455] It is mentioned (p. 76) in the *edvār-i ḳadīm* materials, but only as a notional (*ismi var cismi yok*) mode for which no definition is offered.

[456] There is just one fleeting instance of *f* in Ma. The initial *a* of Mb may be interpreted as an inversion of *A*; and it certainly does not lead to any development of the upper tetrachord.

[457] The breakdown for the various (sub)sections of the exposition (in which only the seconda volta has been included for H1 and Ma (i.e. 3-4 in each case) is as follows:

	G	*A*	*B𝄳*	*c*	*d*	*e*	*f*	*g*	*a*
H1	1	10	3.25	3	1.75	1	0	0	0
Ma	0	5.5	2	2.75	5.75	4	0	0	0
Mb	0	5.5	2	2.75	9.25	9.5	0	0	1
Mc	0	6.75	3.5	6.5	10.25	3	0	0	0
	1	27.75	10.75	14.5	27	17.5	0	0	1

of *f♯*, and the emphasis is again on the *A* - *e* pentachord.

61. şuri

There is just one piece in this mode, 256. Although otherwise quite different to the piece in 10. sipihr, it begins with a remarkably similar fanfare-like figure which recurs in M and, stretched to the octave, H2. But it is far more reminiscent of hüseyni, and in the absence of any description by Cantemir, who fails to mention it in the *edvār*, it is again not immediately clear how the two were distinguished. Indeed, şuri seems even closer to hüseyni than necit hüseyni, for in addition to announcing at the outset the core *A* - *e* pentachord, H1 develops the lower register in a manner akin, say, to 322, while Ma introduces registral balance by developing the *e* - *a* tetrachord.[458] The only detail in the whole exposition that appears at all unusual is the *d c♯ d* flexure in Mb.

H2a and b then expand into the highest register, but there is no change of pitch set and nothing that appears to go beyond the area occupied by H2 in hüseyni: the range is the *d* - *d'* octave and the finalis in each subsection is *a*. H2d constitutes a return to the lower register after a modulation in c marked by an unusual change of pitch set (but one encountered in hüseyni pieces), and a transposed variant of H2d is added after H3, which is again modulatory (and includes a variant of H2c an octave lower). Considering, accordingly, H1, M, H2a, b, d and the final terkīb-i intikal all to exemplify şuri, the evidence they provide suggests that the distinction between it and hüseyni is, if not illusory, most certainly elusive, and a display of relative duration (showing *A*, *e* and *a* to be salient) would bring us no nearer to finding out what the criteria of discrimination are (although perhaps nearer, on the other hand, to finding out why şuri should have been so rare). Indeed, were şuri not unequivocally called a makam in the heading of 256 one might suspect that it was, rather, the name of a piece in hüseyni, especially when there is no mention of such a mode in older sources. It would appear, therefore, to be a late seventeenth-century innovation, and one that in the mid eighteenth-century form recorded by Arutin was still not easily differentiated from hüseyni, of which it appears as a slightly abbreviated variant.[459]

2.2.15 *Unnamed material*

With şuri we reach the end of the corpus in the sense that all the modes which are named as the main mode of a piece have been examined. Further, one or two other modes mentioned in the *edvār* but not in the corpus, such as 50. gerdaniye, have also been taken into consideration, in addition to those, such as 7. şiraz, whose names appear within the corpus only in the modulation sequences of the külliyat pieces. But the *edvār* mentions several other mode names which are nowhere cited in the corpus, and the question therefore arises of whether any other modulatory material can be identified with them. The obvious difficulty is that in these cases, with just one exception, Cantemir provides no clearly articulated description, so that although it is virtually certain that the corpus contains material, however restricted, that could be matched to at least a few of these shadowy entities, connecting the material to the right name may not be possible, especially as the number of potential names available is extremely large, some 40 in all. It consists not only of the remaining 'unused' terkibs listed among the various modulatory families but also of the names occurring in the *edvār-ı ḳadīm* material culled from earlier authorities, for even if some appear antiquated and were presumably no longer known to musicians of Cantemir's generation, others that he fails to mention elsewhere in the *edvār*, such as gülizar, resurface later as makam names, and had evidently never completely disappeared.[460]

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[458] After repeating H1a 1 it proceeds by a varied transposition up a fifth of H1a 2-4. A comparable *A* → *e* beginning occurs in 90.

[459] Tamburist Arutin, *Rukovodstvo po vostochnoi muzyke* (tr. N.K. Tagmizyan), Erevan: Izdatel'svo AN Armianskoi SSR, 1968, p. 90.

The exception, for which Cantemir gives (p. 53) a standard outline description, is hurasani hüseyni.[461] Otherwise the *edvār* does no more than provide a list (p. 27) of those with finalis *A*.[462] But absent from it is, precisely, hurasani hüseyni, the description of which also specifies finalis *A*, so it cannot be concluded that omission necessarily entails a different finalis, and as a result matters are advanced only to the extent that the modal identity of material that cadences on other notes should evidently be sought elsewhere.

Beyond this we have little but the implications of known names to guide us. To take an extreme example, it seems highly unlikely that the very individual material occurring in e.g. 120 H2c, based on an unusual tetrachord (1 2↾ 2 4) absent from all the modes discussed above, would not have been identified as a named terkib; and as it has *A* as finalis we might wish to seek in the first instance a possible identification with one of the modes in the above list, in which case it would appear logical to exclude those with names to which this material seems quite alien.[463] But that still leaves no fewer than eight possible candidates:[464] more information is evidently required in order to narrow the field further, and without having recourse to other sources, which in any case are of strictly limited use, the only straw to clutch at is the fact that Cantemir lists certain modes as members of modulatory families, thereby, it might be suggested, indicating groupings with which certain structural features could be correlated.

However, intractable problems still remain. Within the modulatory family of 48. rast, for example, where the finalis is *G*, we find beyati-hisar, but both beyati and hisar have very little in common with rast: their pitch sets are different and they have finalis *A*, which leads to the conclusion either that the modulatory families can allow very varied structures to be yoked together and are therefore of little value as guides,[465] or that beyati-hisar was some way from being a straightforward compound of the two named elements, in which case this form of modal nomenclature may, at least in certain cases, be deceptive.

The result is that it is usually impossible to find the correct label for unidentified material. But this, it may be argued, is far less important than knowing for exactly which segments such identification would be appropriate, that is, of knowing what would have been regarded as falling outside the domain of the preceding mode and into that of another. In general, it has been accepted that where no obvious modulation can be detected H3 represents a looser reworking of material presented in the initial exposition, but it is not inconceivable that in some cases a particular inflection could have been reified as a separate terkib: the example of 6. safayan is a salutory warning of such unexpected possibilities. It is more than likely, indeed almost certain, not only that some modulations have been misidentified in the course of the preceding survey, but also that others have been simply missed, and in this connexion the külliyat pieces provide a sobering guide. Putting aside the uncomfortable question of how many of the modulations in 296, which is fully annotated, would otherwise have been difficult or impossible to identify correctly, we may look at 22, where after H1 only a few subsections are labelled,[466] and 23, where none are. Of the remaining subsections in the former, in fact, no more than six can be named with any confidence,[467] and some of the remainder are marked unmistakably by their unusual pitch sets as modal entities extraneous to the corpus discussed above. Such entities also appear in two subsections in 23, alongside others that can be identified only tentatively, or not at all.[468]

In reviewing such problematic material we may begin with those entities which lie unequivocally outside the corpus examined above.

62. Isolate species: (a) */1 2↾ 2 4/* and (b) */1 2 3↾ 3/*

In addition to 120 H2c, noted above, subsections based on the /1 2↾ 2 4/ tetrachord occur in a number of pieces. The resemblance between them is so close that they are incontestibly manifestations of a single melodic formula, variation being largely confined to the rhythmic shaping dictated by the particular cycle. (One may note, in addition, a conventional similarity of position, for they are never section-initial.)

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[460] The following are the mode names which do not appear in the collection of notations:
bahr-i nazik, beste ısfahan, beyati-hisar, çargâh-acem, gerdaniye-buselik, gülizar, hicaz muhalif, hisarek, hümayun, hurasani hüseyni, huzi, huzi-buselik, ısfahanek, mubarka'a, muhalifek, musikar, neva-yi acem, neva-yi aşira[ni], neva-yi uşşak, nevruz, nevruz-ı acem, nevruz-ı rumi, nigar, nihavend-i kebir, nihavend-i sagir, nihavend-i rumi, pencgâh-ırak, rakb, sazkâr, sebz ender sebz, segâh arabani, sultani neva, türki hicaz, vech-i hüseyni, zavil, zemzem, zirkeş-havaran, zirkeşide.

[461] It has, he says, two forms, but the proper one consists of beginning from *e*, descending to *G*, and then ascending like ısfahan to *c* and returning to cadence on finalis *A*. (No information is given about the other form.)

[462] This comprises:
çargâh-acem, gerdaniye-buselik, gülizar, hisarek, hicaz muhalif, huzi, muhalifek, neva-yi acem, neva-yi uşşak, nevruz, nevruz-ı rumi, nihavend-i rumi, rakb, vech-i hüseyni, zavil.

[463] çargâh-acem, gerdaniye-buselik, hicaz muhalif, hurasani hüseyni, huzi-buselik, neva-yi acem, neva-yi uşşak, nihavend-i rumi and vech-i hüseyni.

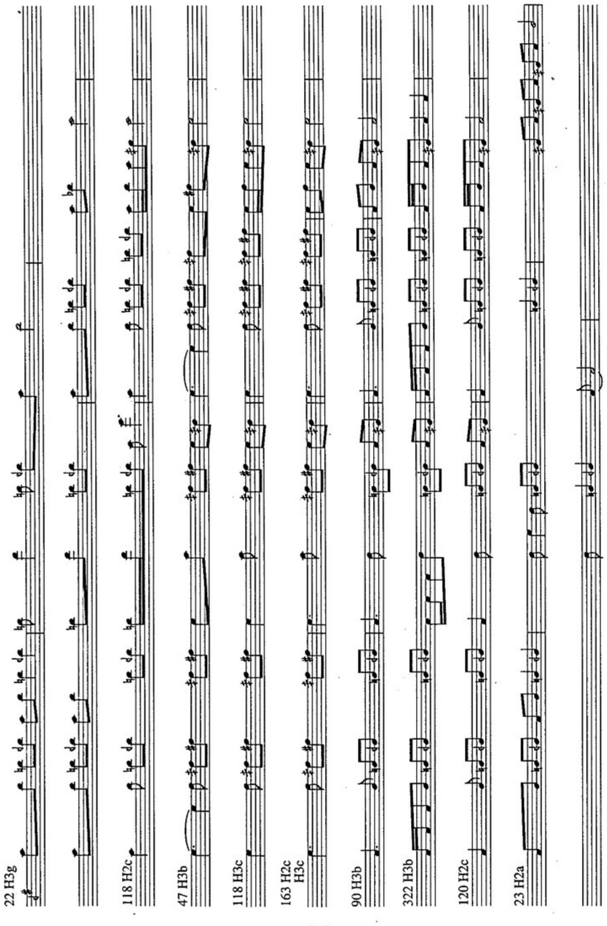
[464] gülizar, hisarek, huzi, muhalifek, nevruz, nevruz-ı rumi, rakb, zavil.

[465] Which is, indeed, what Cantemir at one point suggests (see the initial discussion of 48. rast).

[466] It is not inconceivable that the person doing the labelling was not always sure, especially if some terkibs had become obsolete.

[467] Ma is in şiraz (being identical with H2e, so identified). Mc begins as if in uşşak; and Md appears to be in acem, H2i (at least in part) in mahur, H3b in saba and H3c in şehnaz.

[468] Ma veers between uşşak and hüseyni, Mb and H4a both appear to be in saba (so possibly the first should be assigned to kuçek), Mc is in zengüle, H2a is one of the instances of an unusual pitch set, and H2b is in hicaz. H2c seems to revert to hüseyni, but with finalis c might just be çargâh. H2d is possibly gerdaniye, and H2e repeats Ma. H3a could be assigned to neva, beyati or safayan, H3b has *B♭* and finalis *D*, H3c is in buselik or, more probably, hüseyni-buselik, H3d is in mahur, H3e is perhaps in eviç, or ru-yi ırak in the upper octave, H3f is probably in beyati (or neva). H4a is in saba, H4b is another instance of an unusual pitch set, H4c reverts (at least initially) to mahur, H4d may be assigned to acem, H4e to maye, H4f to ısfahan, H4g to hisar, and H4h, possibly, to neva.



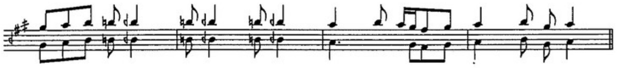
Example 97

The formula consists essentially of two phrases:

1 2↾ 2 2↾ 2 2↾ 1 4 2 2↾ 1 ($\underline{7}$) +
1 2↾ 2 2↾ 2 2↾ 1 2↾ 1 $\underline{7}$ 1

and it occurs with 1 = *A*, *e* or *a*. To the nine complete examples shown opposite in ex. 97 may be added 163 H3a, which includes the beginning of the first phrase (as far as 4), while occasional instances elsewhere of the alternation of *B*𝄳 and *B* may possibly be construed as hinting at this terkib.[469] As it seems to occur hardly at all in what may tentatively be defined as the more recent part of the repertoire—and one may note in particular that it fails to be included in 296, which is not only the most comprehensive of the külliyat pieces but is also the one which consistently illustrates the latest forms of modal development—it is fair to conclude that in Cantemir's day it was probably obsolescent. One would not, consequently, expect to find any similar structure recorded among the mid-eighteenth-century makam definitions provided by Arutin, and although it is true that he cites one instance, in the mode sazkâr, of the alternations of both *B*𝄳 and *B* and *f*♯ and *f*𝄲,[470] it is still the case that it does not employ the specific /1 2↾ 2 4/ tetrachord structure, which appears no longer to be extant.[471] On the other hand, if one ignores the absence of 4 and notes in compensation the inclusion of the leading-note $\underline{7}$, then his definition of the mode kara dügâh comes quite close to the melodic formula outlined in ex. 97.[472] But this name is quite unknown to Cantemir, and it might be thought that a better candidate should be sought among the 35 terkibs he quotes from earlier sources. However, the elliptical definitions provided by his *edvār-i ḳadīm* material are not sufficiently informative to determine which one: indeed, they do not even hint at anything remotely similar. Nor can anything be gleaned from the fact that in three cases this modulation occurs within pieces in 58. hüseyni, for none of the 'unused' terkibs in its modulatory family remain unaccounted for.

There is one further instance of evidently related, if not identical, material, which occurs in 256 H2c and H3c:



Example 98

This resembles closely the latter part of 322 H3b, omitting *d/d'*, and essentially differing only in descending to *F*♯/*f*♯ (so that rather than simply add a leading note below it seems to combine parts of two conjunct tetrachords, /(1) 2↾ 3 4/ and /1 2↾ 2 (4)/). It also occupies a similar position, and further reinforces the connexion with hüseyni, appearing in a piece in the closely related şuri. (This context is, however, problematic from a different point of view, for both the formal complexity and the modal identity of 256 suggest that it is a relatively late piece. Nevertheless, this does not force the abandonment of the above interpretation: obsolescent does not mean obsolete.)

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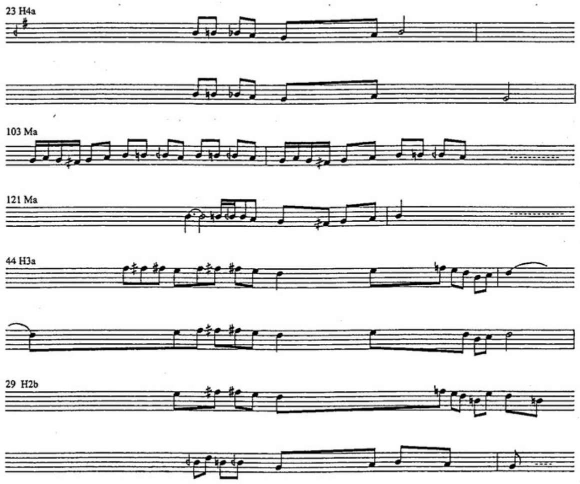
[469] e.g. 113 Mb, 256 H2c, H3c. The apparently anomalous *b*♭ at the end of 22 H3g is best regarded as a transition to H3h, in sünbüle.

[470] op. cit., p. 83. Other modes in which *B*𝄳 and *B* co-occur are kara dügâh and zilkeş-haveran.

[471] Although Arutin (ibid., p. 92) does supply in ru-yi ırak an example of what may be thought of as an inversion of this particular type of chromatic genus, /1 3♭ 3↾ 4/.

[472] p. 84: 1 2↾ 2 2↾ 1 $\underline{7}$ 2 2↾ 1 $\underline{7}$ 1.

It is possible that the /1 2↾ 2 4/ tetrachord featured in yet another subsection, for 23 H4b also contains the crucial alternation of *B*↾ and *B*, and omits *c*. But apart from the simple fact that the formal logic of a külliyat piece runs counter to the same rare terkib being introduced twice, evidence for a different modal identity is provided by the change of finalis to *G*. As 23 H4b also omits *d*, instead of a rather strained analysis in terms of potential pentachords (T + /1 2↾ 2 (4)/ or /1 2 3↾ 3 (5)/) one might prefer the more straightforward /1 2 3↾ 3/.[473] With 23 H4b may be compared segments of subsections in two other pieces; 44 H3a, where a similar contour occurs a fifth higher; and the sequential descent in 29 H2b, which takes in both registers:



Example 99

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[473] Analogies for which can readily be found in the theoretical literature of the thirteenth to fifteenth centuries, which in addition to tetrachords recognizes basic units spanning a third.

It may be noted that the other passages quoted, from 103 and 121, both come from the beginning of Ma, not the most common place to encounter a modulation, and that both pieces are in 48. rast. This suggests that we might be faced here with a deliberately brief allusion to a terkib closely related to rast (and although the identification clearly cannot be put forward with any confidence, of the three 'unused' terkibs belonging to its modulatory family the most likely, or least unlikely, candidate would appear to be sazkâr).[474] 29 H2b goes on to a cadence with finalis *F♯*, but rather than necessarily pointing to the existence of yet another terkib this may readily be interpreted as a tacked-on (if modally varied) repetition of the cadence of H2a; its wider range may be explained simply as a result of combining the two possible pitch positions of the nuclear form.

63. Marginalia

Also to be noted, even if less frequent than the above, are a number of other modulatory passages that, whether in terms of pitch set or of melodic structure, also stand outside the mode stock as described so far. They are:

(a) */A B♭ A (G‡ F♯) G‡ A/*

84 H3c consists of */A B♭ A G‡ A/* and a slightly varied repetition thereof. */A B♭ A G‡ F♯ G‡ A/* appears in 172 H3c **1**, while in **2** we encounter again */A B♭ A G‡ A/*. Confirmation that the two are related is provided by 314 H3b, even if the introduction of *B♭* here can be explained by the influence of H3a, in 25. saba, of which H3b is a modally varied transposition down a minor third. The beginning suggests an incomplete version of 32. zengüle and thence an analysis in terms of a potential tetrachord /(1) 2↾ 3 4/ + semitone.

(b) */G A B c d e f/*

In addition to the rare occurrences of this pitch set that can be associated with buselik or hüseyni-buselik (and therefore have finalis *A*), there are two instances with finalis *G*, one with finalis *g*, and three with finalis *c*.

In 140 H3 *G* is in fact the finalis in both subsections, H3a consisting of an *e* → *G* descent, while H3b is restricted to the *G* - *c* tetrachord, the /1 2 3 4/ diatonic structure of which is normally only encountered on *c*, *d* and *f*. The other instance, 313 H3a, begins by briefly outlining this structure on *c* and then descends to *G* and develops the *G* - *c* tetrachord in a manner akin to 140 H3b.

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[474] The initial emphasis on *B*𝄳 (segâh) followed by the cadence on *G* (rast) fits well enough with later perceptions of this mode, although the case is weakened by the lack of any later evidence for the inclusion of *B* apart from the definition by Arutin (op. cit., p. 83) which, however, differs in other important respects. As before, the *edvār-ı ḳadīm* definitions quoted by Cantemir fail to elucidate matters: that for sazkâr (p. 75) clearly relates to an earlier state of affairs (as does that for karcığar, which as described would seem a more likely candidate). The pitch set *G A B*𝄳 *B* also occurs in zilkeş-haveran as defined by Arutin (pp. 92-3), but this mode descends to *D* and has *F♯* indicated as both initial and finalis. To complicate matters further, it may be recalled (see 1.3.3) that Cantemir gives *B*, normally called buselik, the alternative name rehavi-yi ʻatīḳ when considered a secondary note above *B*𝄳, that is, presumably, when used, as here, in conjunction with it (and to the exclusion of *c*), so that on the assumption of continuity in the identity of the finalis it is possible that we are here dealing with an earlier form of rehavi.

Finalis *g* occurs in 26 H2a and b, where the range is *B* - *a* and the emphasis is very clearly on the *c* - *g* pentachord.

In 49 H3a the range is *A* - *e*; *c* is initial, medially prominent, and finalis, but despite this it would be possible to argue, by analogy with 335 H1 **1-3**, that it should be assigned to buselik. However, the same case cannot be made for the other two instances, 297 H2a, b and 337 H3, where the *G* - *c* interval has some importance and *A* is absent: they could both be thought of as variants of çargâh.

334 H3a begins in the same way, with the *G* - *c* interval, but has finalis *A*. However, it also introduces *e♭*, and may be regarded as an unusual combination of buselik and beyati. A comparable progression appears in 335 H3a, but here the initial ascent begins unusually with the leading note, *G♯*, and rises to *e♭* while omitting *d*, as if suggesting a highly unusual augmented second tetrachord on *B* (/1 2♭ 3 (4)/. After a similar beginning H3b then completes the tetrachord, but with *e* being followed by further modulations.

Finally, mention may again be made in this context of 26 H3b, which uses the */G A B c d e f/* pitch set, but descends to *F♯* and finalis *E* (via an *F♯ G♯ E* cadence).

(c) */A B♭ c d♭/*, */G A B♭ c d e♭ f/* and */F♯ G A B♭/*

The first appears in 116 Mb. The mode of the piece is 17. nihavent (hence the *B♭*), but the melodic contour (together with the *d♭*) is that of saba, except for the finalis *B♭*: we encounter here an unusual intersection of these two modes, possibly to be equated with nihavent sagir: the definition of this given by Arutin has the same pitch set, but adds finalis *G*.[475]

The second appears in a further development of nihavent which occurs in 63 H3 and 72 H3b, both of which inject *e♭*, thereby producing in the former something close to Arutin's definition of nihavent, and in the latter full tetrachordal parallelism.

The third appears in 170 H3b and (in exactly the same melodic manifestation) in 171 H3d. It is not simply to be equated with the lower part of nihavent, for the finalis is not *G* but *A*, associated with which is also a leading note *G♯*.[476]

(d) *araban*

Here a general label rather than a specific mode name, araban points to a productive modal development evidently just beginning in Cantemir's time, the use of the hicaz tetrachord (/1 2♭ 3 4/) from *d*.[477] In this position the 1-2♭ interval cannot be produced exactly with the frets available on the tanbur, so the notation uses either *d♯*, as in 344, or *e♭*, as in 265 H3a,[478] the

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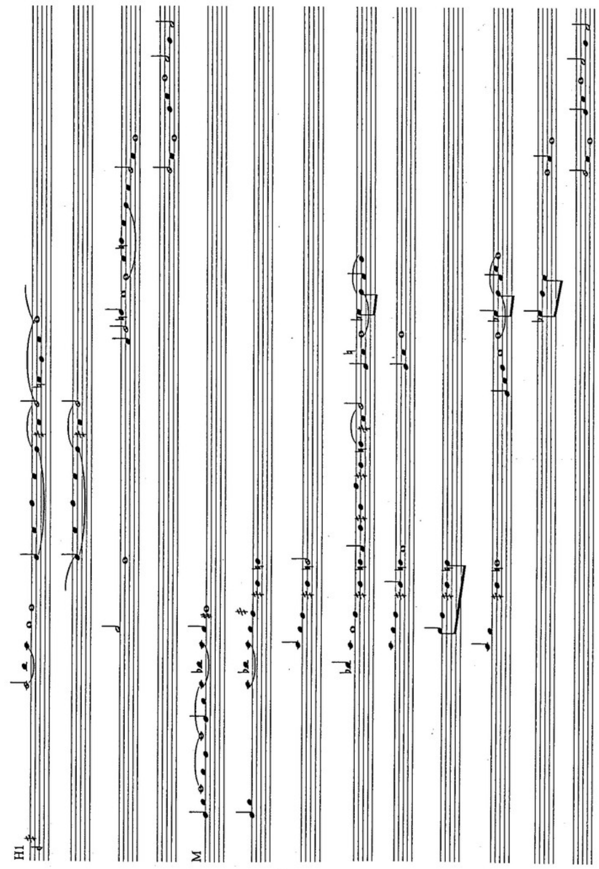
[475] op. cit., p. 82. Arutin also (p. 83) has a nihavend-i sagirek, which may be thought a preferable identification as it remains within the */A B♭ c d♭/* pitch set (if with finalis *B♭*), but this is a name not mentioned by Cantemir.

[476] Transposed up a fifth it also appears in 22 H2i **1** and up an octave in **3**, but **2** develops a different pitch set and **4** has *e* rather than *a* as finalis.

[477] cf. the remarks in Feldman, op. cit., p. 455. Although this particular use of the term may postdate Cantemir, the association of araban with the hicaz tetrachord generally was not new: cited at the end of the *edvār-ı ḳadīm* materials (p. 77) are segâh araban, defined as uzzal ending on segâh, and araban, after which comes a lacuna, evidently representing space for the definition missing from whatever source Cantemir was using which he was presumably hoping to be able to fill from another.

[478] And also in in 344 when the context does not include 3.



Example 100

latter possibly pointing already at this stage to the emergence of a variant with an even larger central interval, /1 2♭ 3 4/.[479]

It is in 344 that this development is concentrated, being used throughout M and the first half of H2. In H1, on the other hand, we encounter /1 2 3 4/ from *d*, so that the modal identity of the whole is unclear. From the material in H1 and M as displayed in ex. 100 above, it looks at first sight as if we are confronted with a mode like ısfahan which changes pitch set, but since the *e*♭ is never associated with a pitch above it may be regarded as no more than a graphemic alternative for *d*𝄲. The broad *a* → *d* → *A* contour exhibits a certain resemblance to that of 53. baba tahir (cf. ex. 80), especially as manifested in 340, but it is obviously not to be equated with any of the modes so far discussed, and is best viewed as a generic precursor of modes such as the second version of maye-beyati as defined by Arutin[480] and the later beyati-araban.

(e) *trichord + semitone*

A semitone flexure above a trichord, typically in a cadential phrase, has been seen to occur commonly in e.g. saba (*c d*♭ *c* + *c B*𝄳 *A*), and also in ırak (*A B*♭ *A* + *A G F*♯). The latter form also appears in the upper octave in 81 H3a, and in its normal position in 23 H3b, where instead of reaching a cadence on *F*♯, which remains non-prominent, the descent continues to finalis *D* (the only example in the corpus apart from 37. acem yegâhi), and given that 23 is a külliyat piece this subsection must have had a separate modal identity. However, the pool of unassigned names fails to include any other compound with yegâh, and there is nothing comparable in Arutin's corpus.

Analogous to the ırak form of this complex is that in 281 H3, in segâh (*d e*♭ *d* + *d c B*𝄳). Important to note here is that this feature is not confined to cadential phrases, and the *e*♭ is no longer just an elaboration of *e*♭ restricted to the *d e*♭ *d* flexure.

In ırak itself 305 Mc and H2b may also be regarded as modally innovative, the introduction of *B*𝄳 in descent provoking a shift to the hicaz tetrachord (in its wider /1 2♭ 3 4/ form) on *A*.

(f) *other*

In addition to the above there are sundry other features confined to just one piece that may be reviewed briefly.

22 H3f has both a unique finalis, *f*𝄲, and a melodic progression matched nowhere else. All in all it suggests a gesture towards şehnaz (but one where the initial *f*♯, following the preceding finalis *F*♯, has associated with it a most unusual initial *f*♯ *f f*♯ flexure) above which is added *b*♭, followed by a descent in which *a* remains prominent, but where the substitution of *f*𝄲 for *f*♯ allows an analysis in terms of a mirror trichordal symmetry: *c*′ *b*♭ *a* + *a g*𝄲 *f*𝄲.

212 H3b proceeds by alternations of /1 2♯ 3 4/ and /1 2♯ 3♭/, as if switching between şehnaz and hüseyni.

220 H3a is made up of a unique compound of 16. ısfahan (31. uzzal → saba) and 43.

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[479] Cf. 305 Mc and H2b, which prefer *B*♭ to *B*𝄳 in notating the hicaz tetrachord from *A*.

[480] op. cit., pp. 88-9.

muhalif ırak (saba → 40. ırak).

Finally, 235 H2b-e (as remarked in note 367) provide an unprecedented sequence of unusual subsections: b alternates *b* and *b*𝄳, as if switching between buselik and muhayyer; c consists only of the pitches *g*𝄲, *a* and *d*′, with finalis *a*; d appears pentatonic (*e g a*, with finalis *e*); and e begins with one unique pitch set, *d e*♯ *f*𝄲 *g*, and then switches to another, *c*𝄲 *d e*♯ *f*♯ *g*, the impression being of a combination of elements of mahur and eviç.

2.3 *Structures and classifications*

Hitherto each makam has been considered as a discrete entity but also, where appropriate, as one of a group of related structures. There remains, however, the broader question of the ways in which it might be possible to generalize about the corpus as a whole, that is, to explore the implications of the term 'modal system' as something potentially more illuminating than a simple enumeration. That the search for some meaningful statement of general connexions (and contrasts) between modes might not be pointless is suggested in the first instance by the fact, as earlier theoretical works demonstrate, that there had been a well-established set of modal categories within the culture, and that Cantemir himself presents us with a clearly articulated scheme of codification incorporating a variety of distinctions (summarized in linear fashion in 1.3.2). These constitute an almost classical structuralist account, based as they are upon a series of explicit or implicit binary oppositions which may be formulated as follows:

makam	vs.	terkib
main notes		secondary notes
simple		compound
[non-transposed]		transposed
[real]		pseudo
[mainstream]		marginal
low register		high register
secondary notes rising		secondary notes falling

Evidently, a superordinate/subordinate contrast runs through the set: in all of the first six cases the right-hand member is marked as of inferior status, while in the last two a hierarchical distinction between seemingly equivalent terms is implied by the order of presentation. The relationships listed thus have a cumulative impact, but they are hardly monothematic, appealing as they do to different criteria: the final two are descriptive, and relate to dominant patterns of melodic contour; the preceding four are derivational, assuming the prior existence of one or more entities which, in a variety of ways, are deemed to give rise to a second entity; and the first two are based on notions of relative importance relatable to, even if not always directly derived from, an essentially statistical mapping of the domain.

These criteria intersect to provide a grid within which every mode can readily be housed. But however commodious, the various parts of Cantemir's classificatory scheme do not lock together in a rigorously logical fashion; nor can it be said that, considered individually, each one always has assigned to it the most appropriate modes, perhaps the most flagrant example being provided by the most important group of all, that constituted by the (no doubt inherited) category of the so-called main-note modes. Ignoring the internal division into high- and low-register modes, it is evident that this category is bedevilled by internal inconsistencies. As has been seen from, say, the discussions of 54. dügâh and 50. gerdaniye, filling all the slots (i.e. matching a main-note mode to each main note) required a certain sleight of hand[481]—so that the fact that the attempt was actually made is highly significant, indicating an urge to systematize strong enough to override the recalcitrant facts on the ground.

Indeed, it could be argued that the degree of distortion was even greater than that implied by the co-opting of two highly marginal entities into the front rank, for it also involved the regularization or ironing out of various asymmetries within the repertoire of pitches. Viewed statistically it is clear that Cantemir's collection of notations does not provide conclusive evidence for the hierarchy of main versus secondary notes that is such a vital element in his scheme of modal classification. Cursory examination of the data presented above is sufficient to establish, first, that the incidence of *D* and *E* is extremely low: they are members by default, owing their place to the importance of their octave equivalents as much as to the fact that there were no low-register competitors. But the more serious discrepancy concerns the core *F♯* - *a* range: the pitches *G A B𝄳 c d e g* and *a* are certainly used much more frequently that those immediately adjacent to them, but the equally privileged status of *F♯* and, up to a point, *f♯* is less easy to justify. Inclusion of the former in the main-note set is based almost solely on its presence in 40. ırak and 44. eviç, where it functions as the finalis, but setting these admittedly major makams aside its position is somewhat difficult to defend. Among the other main-note modes *F♯* is used occasionally in 58. hüseyni, but it is more usually conspicuous by its absence, occurring hardly or not at all in 51. muhayyer, 50. gerdaniye, 57. neva, 14. çargâh, 45. segâh, 55. uşşak (=54. dugâh) and 48. rast. Rather more common in the remaining mode stock is *F𝄲*, and this pitch is certainly preferred in segâh, uşşak and, especially, rast, on which basis a convincing case could be made either for excluding these three, and rast in particular, from the category of main-note modes, or for including *F𝄲* as an alternative to *F♯* within the main-note set. As is clear from the discussion of dügâh, a parallel but stronger case for exclusion could be made in relation to uşşak, which uses *f* rather than *f♯*. Although it is no doubt the case that statistically *f♯* is easily the more frequent of the two in the corpus as a whole, so that its inclusion in the main-note set is as of right rather than simply because of octave parallelism, the fact remains that *f* is also extremely common, and they quite often occur together in the same piece, so that a more realistic if again less rigorous definition of the main-note set would be one which included both as alternatives. This would have the virtue not only of legitimizing the presence of uşşak[482] but also of avoiding the relegation to secondary status of 35. acem, one of the more important makams in the instrumental repertoire. Finally, one may mention a further (if less significant) distortion: a feature generally absent from the notations but emphasized in the verbal descriptions of the two main-note makams segâh and eviç is the possible raising of *A* and *e* respectively, and this would again make them discrepant.

There are thus a number of irregularities both in the selection of the set of main notes and in the match between it and the modes assigned to it: the urge to classify was evidently

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[481] Cf. the discussion in Feldman, op. cit., pp. 223-5, which recognizes the dubious status of dügâh/uşşak consequent upon its inclusion of a secondary note.

[482] And of avoiding queries about the status of çargâh, where *f* was sometimes (and perhaps increasingly) preferred to *f♯*.

sufficiently compulsive to cause a blind eye to be turned to attendant mismatches.[483] It could be argued, further, that the criteria Cantemir employs here, contrary to those positing derivational relationships, are fundamentally arbitrary because extrinsic: they do not attempt to uncover underlying structural connexions and hence are ultimately not concerned with the extent to which the modes themselves might form a system as a whole, rather than have one imposed on them by primarily codificatory tools. But more important than detecting flaws in the method of classification is to recognize the nature of the conceptual armature being used, and that what the hierarchy of sets fundamentally articulates is a suggestive spatial metaphor of propinquity and distance: a core of main-set modes is surrounded by satellites at various degrees of remoteness which, in addition to the obvious facts of pitch-set differences (including the identity of the finalis), are articulated through two other parameters, derivation and contour, both, interestingly, reflected in the nature and taxonomy of the definitions provided by earlier theorists and both, in the light of the previous analyses, pertinent here. Thus an attempt to detect a coherent set of relationships through comparative examination of patterns of melodic contour, prominence and pitch set is not only consonant with Cantemir's own conceptualization but is also broadly congruent with the intellectual framework within which the repertoire of modes had for long periods been conceived within the culture.

It might be claimed that the differences between certain modes are such that it is hardly worth trying to bring them together into some kind of comprehensive scheme, and it is certainly the case that, say, hüseyni and one or other of the shadowy modal entities discussed in 2.2.15 are hardly commensurate. But they are nevertheless complementary, not only in the simple sense that both might appear in the same composition but also because the possibility of setting up meaningful contrasts between them implies that they form part of a larger complex in which neither materials nor processes are random. Which underlying regularities are discovered may depend primarily on the tools used, but the nature of the material to which they can be applied is crucial too, and it is worth beginning by reiterating the obvious: Cantemir's notations already embody analytical decisions to the extent that they omit at least those features sufficiently variable from performance to performance to be considered extraneous to the basic form in which a composition might appropriately be recorded: choice of instrument(s), timbre, dynamics (the second and third both partly a function of the first), tempo, and certain melodic and rhythmic details: all that remain to be worked with, therefore, are selected aspects of pitch and duration, and the fact that these parameters have been accorded particular importance within the Western analytical tradition should not obscure the fact that they provide only a limited perspective, even if in this case one dictated by emic perceptions.

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[483] According to Feldman's analysis (op. cit., pp. 225-6) similar problems attend the set of (non-compound) secondary-note makams which, it is said, is characterized by the replacement of one main note by a secondary note, but actually includes a majority where there are two such replacements (a fact disguised for some by the rather wayward notated outlines given). The argument seems to derive from Cantemir's discussion of hüseyni (p. 32), where he argues that, with the exception of beyati, the replacement of the characteristic note (not notes) of these secondary-note makams by the corresponding main note will result in hüseyni. But the numerical restriction here must be regarded as an incidental slip, and no such qualification is made in the introduction to the two main sub-groups of secondary-note makams. More illuminating is Feldman's observation that implicit to these main sub-groups is that they should have finalis *A*, which helps explain why mahur, which has finalis *G*, has to be relegated to the compound (*mürekkeb*) category.

In the preceding discussion both parameters were subject to systematic reduction. The omissions concerned in the first instance a layer of rhythmic information deemed irrelevant to a synoptic presentation of the melodic contour (an attempt to restore the balance and investigate aspects of rhythmic organization will be made in the following section), and subsequently a telescoping of the notation of areas of elaboration. But the individual (sub)sections representing each composition were recorded as discrete entities, and further drastic compression is now required in order to move from a cumulative and detailed representation of the modal exposition in every piece towards some form of generalized rubric under which all can be subsumed.

Here a number of problems arise. As the previous discussions make clear, there are instances in which the general morphology of a given mode cannot be defined crisply. A combination of differing pitch sets may be involved; there may be a considerable variety of melodic potential; and boundaries may be vague, since it is not always clear whether what appears to be modulatory is indeed so, or whether it is an integral element. Of these three factors the first is merely awkward: it is the other two that are problematic, creating substantive difficulties, and as far as the last is concerned the strategy here will continue to be one of avoidance, only those parts previously selected for consideration being included, so that representation is again based on the exposition in H1 and M. But the crucial question still remains of how, within whatever area is selected, to provide a succinct but exemplary analytical outline of modes that are not readily reducible to a single pattern. Assuming that it is important to be able to give some insight into the trajectory of events between initial and finalis a form of linear display would seem appropriate, ideally one incorporating a method of representation sufficiently explicit to allow scrutiny of the stages through which its most abstract level is reached (and justified). A particularly attractive model is that offered by Widdess in his study of Indian notations, especially given the broad analogies that can readily be drawn between creative procedures in makam and rāga, and reference has already been made in 2.1 to the similarities between the technique of abstraction employed there and that resulting in exs. 18-100.[484] At the same time there is a significant difference, for missing from these is any parallel to Widdess' final stratum (termed 'schema').[485] But however desirable some form of further reduction based on similarly sound analytical principles, the need to take into account the whole (and often very extensive) repertoire of a given mode rather than one or two sections in a single composition precludes such detailed presentation for the corpus as a whole. Indeed, even for those makams where the amount of material to be examined is relatively small, similar clarity and precision is unattainable. In illustration, 30. hicaz may serve, a makam where, if we exclude the many modulatory passages in which it appears, there are to be considered only the four instances displayed in ex. 51. For these it is in fact not particularly difficult to devise a compressed display that can still encapsulate something of the flexibility evidently characteristic of compositional method by indicating the ways in which different sequencing choices were made. But such compression causes

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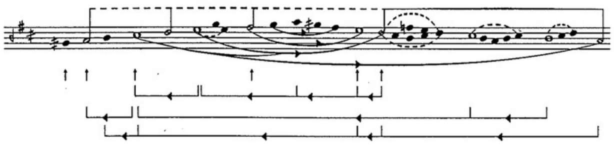
[484] See note 6.

[485] To take a fairly average item in illustration, one might compare 220 H1 and M with one of Widdess' more extensive examples, that of the rāga śuddha-ṣāḍava (op. cit., pp. 320-3). Although less sophisticated, the reduction of those sections of 220 given in ex. 51 offers points of comparison with the first layer of the analysis of the śuddha-ṣāḍava material, but hardly with the second.

congestion, and matters become more complicated still as further essential information is added, for example, marking which notes are initial and which function as (sub)section finalis, especially if a final analytical layer is to be incorporated indicating, say, what are interpreted to be the major structural nodes. Thus if we use:

- a void note head to indicate a pitch which is a focus of elaboration;[486]
- a broken tie to indicate the span of elaboration where it exceed one step above and/or below the pitch in question;
- a horizontal bracket beneath to link points of exit and anterior re-entry (i.e. the intervening material can be repeated);
- a slur to link points of exit and posterior re-entry (i.e. the intervening material can be omitted)
- a diamond note head to identify a note which functions as (sub)section finalis;
- an arrow to identify a note which functions as (sub)section initial;
- upward stems joined by a beam to identify major structural nodes[487]

we have in full:



Example 101

The consequence of inclusivity is thus excessive visual clutter, and despite the number of compositions in hicaz being so few it is clear that saturation point has been reached. For this type of analytical reduction the sheer volume of material in more populous makams is prohibitive: a similar presentation would be, if feasible, virtually illegible and certainly intolerable. There are, nevertheless, a number of less common modes in relation to which such abstracts can usefully perform a primarily comparative (rather than purely analytical) function, and since for this purpose the same degree of comprehensiveness is not required preference may be given to a more transparent form of representation achieved by the following simplifications:

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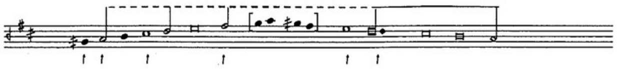
[486] So that although relatively long duration will normally be implied by elaboration this feature is not represented *per se*.

[487] In identifying these, account is also taken of the information on durational salience incorporated in the displays. Occasionally a beam joining downward stems will be used to suggest prolongation.

- slurs and brackets beneath will normally be omitted (but material that is infrequent will be placed between square brackets);
- broken ties and the material they enclose will be omitted, and the pitches to which they relate (foci of elaboration exceeding one step above and/or below) will be indicated by square void note heads (it is assumed that the pitch zone in question may be up to a fourth or fifth above or below);

thus yielding for hicaz, in comparison with ex. 101:



Example 102

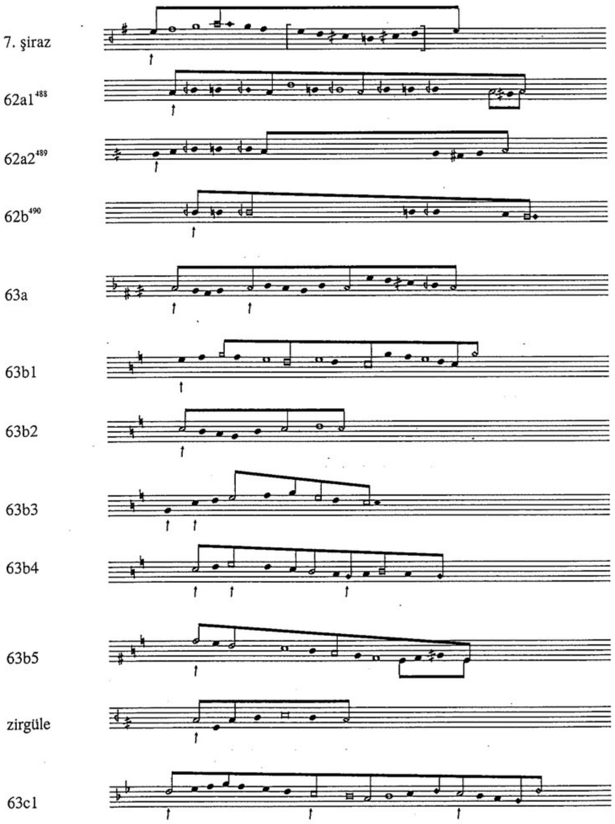
Increased clarity comes, of course, at a price. But although ex. 102 fails to indicate how jumps forward and backward can be made the loss may be mitigated by assuming (in most cases correctly) that they are likely to occur fairly freely between the major structural nodes and, conversely, less likely to occur between other notes: we are still left with a shape that manages to encapsulate an indication of preferred habits of melodic formation. What it does not do is define exactly what must be included or specify a normative sequence of events beyond defining initial and finalis notes: it is not, in short, analogous to the kind of route map provided by a modern *seyir*.

2.3.1 *The rarer modes*

We may begin both at the beginning and at the end of the preceding survey of individual modes, taking into account, in ex. 103, all those structures which fail to function as the main mode of a piece and are not readily resolvable into known elements.

For all that this material is in certain respects quite heterogeneous, the various profiles that emerge are decidedly less so: there are just two preponderant types of melodic contour: oscillating (with the same pitch often serving as both initial and finalis) and falling. Indeed, 1. hüzzam appears to allow both, while the one exception, the shorter form of 7. şiraz, which ascends from *e* to finalis *a*, is counterbalanced by the longer form, which is clearly oscillating. But even if they exhibit little structural variation, these marginal modes are certainly not devoid of unusual (i.e. rare) features, and there are at least three general characteristics that occur, together or separately, in most, and may reasonably be thought to correlate with their fringe status. They are:

(a) being confined within a narrow ambitus;
(b) being based on a pitch set not found in modes used as the main mode of a piece;
(c) having a rare or unique finalis.



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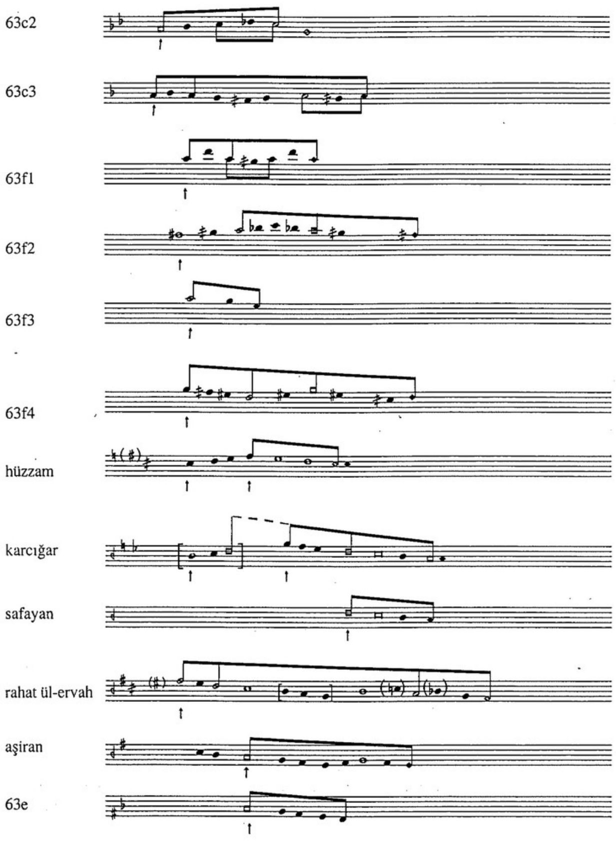
[488] Also a fifth and an octave higher.

[489] Also an octave higher.

[490] Also a fifth higher.



Example 103

The distribution of these features is as follows:

	(a)	(b)	(c)
8. şiraz	?	?[491]	*
62a1	*	*	
62a2	*	*	
62b	*	*	
63a	*	*	
63b1	*	*	
63b2	*	*	*
63b3		*	*
63b4		*	
63b5		*	
4. zirgüle	*	*	
63c1		*	*
63c2	*	*	*
63c3	*	*	
63f1	*	*	*
63f2	*	*	*
63f3	*	*	
63f4	*	*	*
1. hüzzam	*	*	*
2. karcığar		*[492]	
6. safayan	*		
3. rahat ül-ervah		*	
5. aşiran	*		
63e	*		*

Table 1

All are restrictive. The first inhibits the possibility of extended melodic development, while the third, particularly if in combination with the second, places the mode in question in a form of quarantine where it is unable to subordinate others to it as modulatory satellites. As a result it is itself forced into precisely that role, being confined to occasional appearances in modulatory subsections.

Since no further markers are required for identification in modes that are unique with regard to pitch set and/or finalis, the consequence, in theory, should be greater potential melodic freedom. But there is virtually no melodic unorthodoxy to be detected in this group, and even if the scale is smaller the techniques followed are those encountered in the major makams, where we also find a broad (if by no means sharply defined) division into those that tend to articulate a fundamental arch shape or have a falling trajectory and those that tend to follow a more oscillating pattern. In the descending members of the group the major structural nodes are mainly a fourth or a fifth apart, while further uniformity is provided by the fact that in the majority of the oscillating ones it is possible or obligatory to have a final descent (in two cases followed by an upward leap of a fifth to the finalis). This is all the more striking given that the criterion of selection was the purely negative one of infrequency, on the basis of which one might rather have predicted a certain eccentricity. But on reflection the general similarities in melodic strategy encountered here are hardly unexpected, the most likely interpretation being simply that the prevailing compositional habits interiorized during the lengthy process of mastering the principal makams were not departed from when it came to exploiting these further recesses of the mode stock, and in support of this conclusion one may cite the fact that similar general contours have been found to occur in those modes that appear as the main mode of just a few pieces even when they are likewise unique with regard to pitch set and/or finalis and hence free of other differentiating constraints.

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[491] (a) and (b) are mutually exclusive, (b) requiring the version with *B* and *c*♯, (a) that without.

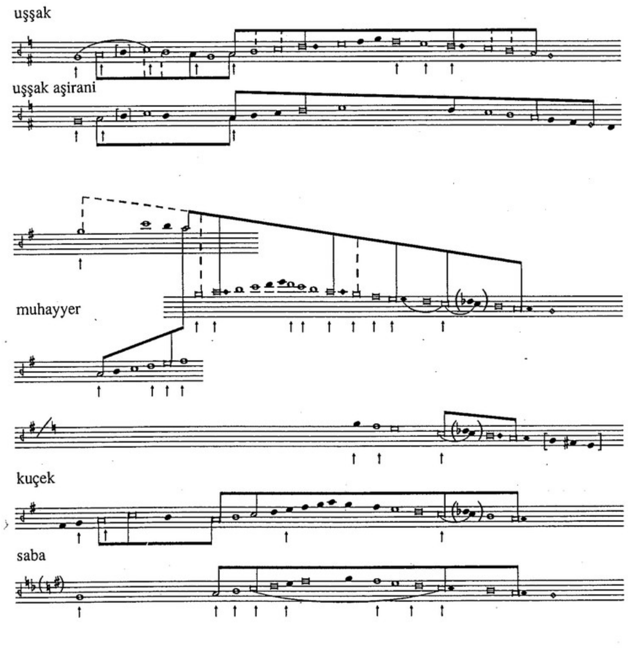
[492] There is a partial overlap with beyati, but the latter can use *e*, karcığar not.

2.3.2 *Group affiliations*

Against this background of a conformity to one or two basic patterns of melodic development that appears to mark the repertoire as a whole, and hence does not require further investigation at the level of the individual mode, we may turn to a consideration of relationships between modes. In some cases these are already apparent from (and indeed are the justification for) the various groupings posited in 2.2, which are based primarily on the sharing of a common pitch set.

In other cases, however, new juxtapositions may be proposed in order to shed light on common elements, as in ex. 104. This has the virtue of pointing up significant motivic resemblances, and thereby demonstrates connexions between makams that, purely on the basis of their pitch-set affiliations, would be placed in different groups. In consequence, it reinforces the argument that classification of the mode stock by pitch set alone runs the danger of yielding no more than an inert catalogue. But at the same time it makes clear some of the structural variations that can be found: saba, for example, has (in both manifestations) a trichordal base, uşşak aşirani a clearly delineated tetrachordal articulation, and muhayyer a lower *A* - *e* pentachord which is not resolvable into tetrachord + whole tone but is evidently triadic. Any investigation of the modes as a comprehensive system would need to take account of such differences and, ideally, attempt to discover why certain structures occur and others not.

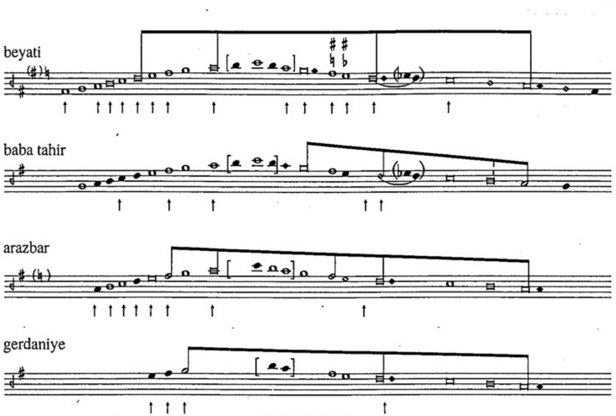
Similar variations are apparent in another group, shown in ex. 105. In this case the type of abstraction employed clarifies not particular melodic features but rather some of the structural ways in which a rather confusing batch of overlapping modes are distinguished one from the other. They all have in common a prominent *A* - *d* tetrachord, and the occasional pitch-set contrasts (the injections of *e*♭ which occur in both beyati and arazbar, the possible substitution of *f* for *f*♯ in both beyati and baba tahir) are not fully sufficient as differentiating features. But a clearer picture is given by the varying patterns of structural nodes, which distinguish beyati from baba tahir and both from the other two; and where the same pattern appears in arazbar and gerdaniye we find that the latter is distinguished by its exclusively descending contour.



Example 104

2.3.2.1 *Nuclear elements*

Apart from the latter point, differentiation can often be shown quite adequately by a combination of identifying the segments comprised between the structural nodes and plotting their distribution, and this particular approach gains in usefulness if we are to abandon the fruitless quest to provide in a concise but legible analytical format all relevant information about each individual mode in favour of sketching a map of the resources upon which they draw. In the light of the earlier Systematist analysis of modes in terms of octave scales and more specifically in terms of their constituent tetrachord and pentachord combinations it might be thought that a similar shortcut could be used here to arrive at a schematic outline, even if the existence



Example 105

of triadic structures and trichordal as well as tetrachordal articulations points to a rather more fluid and complex set of relationships. However, just as the purpose of Ṣafī al-Dīn's grand combinatorial scheme[493] was not to provide an economical tool designed to describe (all and only) the modes in actual use, so here too an analogous catalogue of potential structures would be greatly in excess of those that actually occur, and whatever might be systematic about the mode stock would remain at best only partially explained and at worst might actually be disguised. But neither is it adequately elucidated by Cantemir's own methods of description and categorization: even if based in part on structural criteria, their purpose, as already noted, is to produce a classified inventory rather than a grammar.

Nevertheless, the notion of an underlying system need not be simply dismissed as a trite figure of speech. Rather, it suggests that consideration may be given to the ways segments are constituted as well as to the ways they combine. We may, accordingly, distinguish:

(a) a set of intervals
(b) the various trichordal and tetrachordal combinations thereof
(c) the various concatenations of these forming individual modes

With regard to (a) it is at least clear that the collection of intervals that occur is not random, for with an approximate quartertone as the smallest unit of discrimination there are

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[493] *kitāb al-adwār*, ed. Hāšim Muḥammad al-Rajab, Baghdad: manšūrāt wazārat al-ṯaqāfa wa-'l-i'lām, 1980, pp. 79-85.

no gaps in the sequence of indivisible intervals appearing in the corpus:

$$^{1}/_{4} \qquad ^{1}/_{2} \qquad ^{3}/_{4} \qquad 1 \qquad 1\,^{1}/_{4} \qquad 1\,^{1}/_{2}$$ [494]

(For convenience, they will be referred to as 1 2 3 4 5 and 6 respectively.) It may further be observed that there is a regularity about the frequency of occurrence of these six intervals which takes the form of a near-perfect mirror symmetry: 1 and 6 are sufficiently uncommon to be regarded as marginal, while 3 and 4 are by far the most common.

One obvious reason for this is that, with one (again marginal) exception, it is only 3 and 4 that are repeated within the structures occurring in (b). For the most part, the tetrachords that can be disengaged from the corpus are governed by the following conditions:

1. There are three constituent intervals.[495]
2. 1, 5 and 6 only occur as the central interval.

They allow, first, the following sets:

3 3 4
3 4 3
4 3 3

4 4 2
4 2 4
2 4 4

all members of which occur, if with very different frequencies.

In addition, they allow a further three tetrachords only:

2 5 3 2 6 2 3 5 2

3 5 2 is common, while 2 6 2 occurs as an infrequent variant thereof. But 2 5 3 fails to appear, while the one other structure that is attested, 3 1 6, is excluded by the conditions, so that they provide an approximate rather than exact fit. At a pinch 2 5 3 could be disposed of by just speaking in terms of there being a tetrachord with a larger-than-wholetone central interval, and adding the condition that within the exemplary central octave:

3. The tetrachord with a larger-than-wholetone central interval must be from *A* or *e*.

The point of this restriction is that 2 5 3 cannot then occur within the confines of the existing pitch set. It is valid for most of the repertoire but, as a further complication, not for the latest stage recorded in the collection, which also allows such a tetrachord to occur on *d*, in which position 2 5 3 becomes feasible.

But 3 1 6 remains a stubborn exception not to be similarly effaced: it is the only tetrachord in which 1 appears, and the second condition would require an *ad hoc* (and therefore pointless) amendment to account for it. Its marginality is scant consolation.

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[494] There are one or two modes (e.g. kuçek, sünbüle) which jump from *e* to *c*, so that a case could be made for extending the series to 2, in which case there would be a gap. However, even if the jump is characteristic an intermediate pitch will normally appear at some stage, so that it can hardly be considered indivisible.

[495] Etymologically pleonastic, this condition is required in order to exclude pentatonic components (so that 235 H2d (see 2.2.15, end) needs to be analysed for present purposes as consistently omitting an underlying scale degree).

Given the observations on frequency made in relation to (a) it is hardly surprising to find that of the nine tetrachords that occur the most common of all is /1 2↾ 3♭ 4/, while also frequent is /1 2 3↾ 4/. All the others may be obtained by making a single alteration to one or other of these two,[496] but it can hardly be claimed that such relationships are derivationally meaningful, whether synchronically (with the possible exception of /1 2 3↾ 4/ → /1 2 3♭ 4/ as part of a contextually determined modal shift) or diachronically. More pertinent, perhaps, is to note that the reason for the greater frequency of /1 2↾ 3♭ 4/ as against /1 2 3↾ 4/ may be found by again making appeal to pitch resources, and in this case specifically the main-note set, for whereas they both occur within the lower of the two main-note core pentachords, *G* - *d* (/1 2↾ 3♭ 4/ from *A*, /1 2 3↾ 4/ from *G*), only the former occurs within the higher, *A* - *e*.

If, as a block, the tetrachords may be characterized as largely (although by no means completely) systematic, by analogy one would expect the same to be true of the trichords. Assuming a trichord to be equivalent to a tetrachord less its upper interval, we would have corresponding to the previous two sets:

3 3	4 4
3 4	4 2
4 3	2 4

and again, all of these occur. One might therefore predict in addition 3 5, 2 6 and 3 1. But only the first two occur, albeit in contexts that confirm their equivalence, respectively, to 3 5 2 and 2 6 2 less the upper interval. The other trichords that occur are, unexpectedly, 6 2 and 6 1. For the former one could suggest a relationship with the tetrachord 2 6 2, but given the context in which it occurs this has little to recommend it: we have here another seemingly anomalous structure. The second, on the other hand, despite seeming even more unusual, can be accounted for without difficulty through the derivation /1 2 3↾/ → /1 2♯ 3↾/: it remains a variant of /1 2 3↾/ and results from a historically attested evolution.[497]

(The pentachords that may be identified within the corpus do not need to be dealt with separately, being fairly readily resolvable into tetrachord + whole tone (T) (or T + tetrachord); or into trichord + trichord, as follows:

/1	2↾	3♭/1	2	3/						
/1	2↾	3♭/1	2♯	3/						
/1	2	3♭/1	2	3/	or	/1	2	3♭	4/	T
/1	2	3↾/1	2↾	3↾/	or	T	/1	2↾	3♭	4/
/1	2↾	3↾/1	2	3↾/						
/1	2↾	3/1	2♭	3♭/	or	/1	2↾	3	4/	T
T	/1	2↾	3	4/						

2.3.2.2 *Compounds*

We may now proceed to (c) and the search for combinatorial rules among the elements from which modes are compounded. The first to be examined will be the most common modes, together with those closely associated with them, on the assumption that whatever patterns of association characterize them are likely to be if not normative then at least predominant, whereas the converse is unlikely. The modes in question are hüseyni (together with muhayyer, şuri and necit hüseyni), neva (together with gerdaniye and baba tahir), rast (together with rehavi and salmak), segâh (together with maye and bestenigar), ırak (together with eviç), and acem (together with uşşak, acem aşirani, acem yegâhi and uşşak aşirani). These function as the main makam in some 218 pieces, and thus provide the expository material in almost two thirds of the collection.[498]

As before, it is to this expository material, contained in H1 and M, that the following account relates: it makes no attempt to incorporate the exploration of the high register which normally follows in H2. Ignoring pitches which appear only fleetingly at the upper and lower extremities, and taking account of contours of salience in order to arrive at the most appropriate segmentation, the internal organization of what is statistically by far the most important part of the mode stock can be described in terms of the following repertoire of elements:

trichords	tetrachords
/1 2♭ 3♭/	/1 2♭ 3♭ 4/
/1 2↾ 3♭/	/1 2↾ 3♭ 4/
/1 2 3♭/	/1 2 3♭ 4/
/1 2↾ 3↾/	
/1 2 3↾/	/1 2 3↾ 4/
/1 2 3/	/1 2 3 4/

The tetrachords are generally segregated: /1 2♭ 3♭ 4/, /1 2 3♭ 4/ and /1 2 3 4/ are confined to the low register, while /1 2↾ 3♭ 4/ and /1 2 3↾ 4/ are both excluded from it and—hardly surprising since we are confronted here exclusively with main-note modes—are the only ones to appear in the mid register.

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[496] So that from /1 2↾ 3♭ 4/ we have:

+ : 3♭ → 3↾ /1 2↾ 3↾ 4/ - : 2↾ → 2♭ /1 2♭ 3♭ 4/
3♭ → 3 /1 2↾ 3 4/ 3♭ → 3♭♭ /1 2↾ 2 4/

and from /1 2 3↾ 4/:

+ : 3↾ → 3 /1 2 3 4/ - : 2 → 2↾ /1 2↾ 3↾ 4/
3↾ → 3♭ /1 2 3♭ 4/

[497] One might suggest that the unusual tetrachord 3 1 6 could be accounted for by an analogous development from 3 3 4 (i.e. /1 2↾ 3♭ 4/ → /1 2↾ 3♭♭ 4/), and it is interesting to note that where Cantemir has /1 2↾ 3♭♭ 4/ 'Alī Ufḳī may have /1 2↾ 3♭ 4/ (see e.g. in Part i the notes to 22 H3g). However, the problem is that whereas in /1 2 3↾/ → /1 2♯ 3↾/ the change is contextually determined (2♯ being the raised leading note before finalis 3↾), here no similar causation is apparent, and although enticing, 'Alī Ufḳī's notation is not conclusive as evidence, for given his frequent omission of accidentals it is quite possible that (in the case of 22 H3g) his *c* ' (3♭) is to be interpreted as *c♭* ' (3♭♭). If not, we would be faced with a seemingly motiveless modal development datable to the middle of the seventeenth century that already by the end of it was obsolescent.

[498] Which is not to say, however, that they constitute an equal proportion beyond the exposition area. It has been noted, for example, that because of its frequent appearance in modulatory passages hicaz has a rather more significant presence in the collection as a whole than that indicated by the number of pieces in which it is the main mode. Conversely, recourse to hüseyni in modulatory passages is infrequent. Nevertheless, the predominance of the modes listed is incontestible.

Additional features to be noted are:

the use, especially in ırak, of a semitone flexure above the root trichord:
/1 2↾ 3↾/ + S (=4↾)
the occasional use, specifically in muhayyer, of a gapped trichord:
/1 (2) 3/
the optional use, especially in segâh and eviç, of the trichord with the raised second degree:
/1 2♯ 3↾/

(The last is remarked upon but hardly ever notated by Cantemir. It may legitimately be regarded as a variant of /1 2 3↾/, from which it derives, and will be ignored in what follows.)

In this context it may be helpful to expand the previous high/low register contrast to three terms, high, mid and low, although without making the demarcation any more precise: low will normally relate to material below *A* or *G* (depending on the position of the relevant structural node) and high to material above *d*, *e* or *f*. For visual convenience the way the various elements combine in this block of modes is displayed in fig. 1 along two axes: vertical relationships are those between mid range (from *G* or *A* to *d* or *e*) and high range (from *d* or *e*), while horizontal relationships (left to right) are those between low (up to *G* or *A*) and mid range elements. The arrows always point from lower to higher, but imply nothing about the normal course of events in a given mode.

The relationship between the various elements within each modal combination, as fig. 1 shows, can be summarized quite simply as:

- complete parallelism at the fourth or fifth (there are no imperfect relationships)
- incomplete parallelism at the fourth or fifth (there is one imperfect relationship).

In other words, contrast is either avoided completely, or is reduced to a minimum. Where there is a diversion from the original main-note series by the inclusion of *f* (or *F*), the resulting loss of a consonant relationship (*B*𝄳 - *f*♯/*F*♯) is compensated for by the creation of another (*c* - *f*/*F*) and only one note (*B*𝄳) is left unattached. On the other hand, where there is a diversion by the inclusion of *F*‡ it is this note which remains isolated, and there is no compensation for the loss of the *F*♯ - *B*𝄳 consonant relationship. However, it should not be concluded from this that there was a tendency towards a reduction of parallelism associated with the low range, for *F*‡ occurs in finalis *G* modes where the preference for *F*‡ over *F*♯ as a leading note overrides the pull of consonance. What this demonstrates, therefore, is that rather than being unmotivated, lack of parallelism may sometimes have a functional cause; and decisive evidence that consonance, in the narrow sense of perfect fourth and fifth relationships, is not the only structural principle at work is shown by the fact that there are several modes in which the position of the functionally important nodes is otherwise determined (hence the role of trichords alongside tetrachords and the more frequent analysis of pentachords as consisting of two trichords rather than of tetrachord + whole tone).

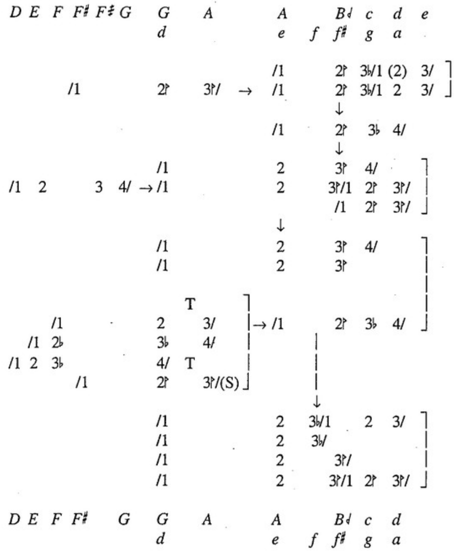

Figure 1

Although it seems incontrovertible that the status attached to Cantemir's original set of main notes depends upon the importance of the modes from which it is abstracted, rather than vice versa, it is clear that any mode using only main notes cannot but exhibit complete parallelism at the fourth or fifth, and each note in it will stand in a consonant relationship with at least one other. At this level, therefore, no other norms are possible, and we need to turn to the modes including the so-called secondary notes to see what variations exist. We may consider, first, the buselik group, taken here to consist of buselik, acem-buselik, hüseyni-buselik, buselik aşirani, büzürk, zirefken, huzi aşiran and the various structures discussed in 63b, even if their disparate nature results in the picture set out in fig. 2 being a little less neat. As this shows, the elements already encountered in fig. 1 also account for most of the buselik group. Two of the trichords, /1 2↾ 3↾/ and /1 2 3↾/, do not occur, but there is only one new element, the tetrachord /1 2↾ 3 4/, which has a marginal role in the low register. In general, the same conditions apply to the ways in which the various elements combine. Given that the

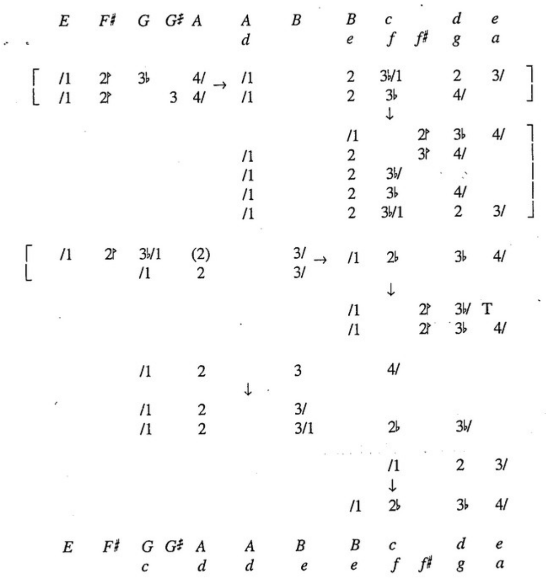

Figure 2

introduction of the characteristic *B* of buselik is, in several cases, the only change to the main note set, there are no consonances with *F♯* or *f♯* (or even *b*). While the loss of the *B*𝄳 - *f♯* /*F♯* perfect fourth and fifth relationships is compensated for by the new *B* - *e* fourth, *F♯* and *f♯* remain unattached, which means that where they occur only partial parallelism at the fourth or fifth is possible. But most combinations do not exceed the limit of one imperfect relationship, so that in terms of maximizing the number of possible consonances they are if anything even more orthodox than the main-note modes. It is hardly surprising, therefore, that the only exception, /1 2↑ 3 4/ + /1 2 3♭ 4/, should be one of the marginal entries in 63b.

An even more numerous group characterized by one or more secondary notes consists of those using the hicaz tetrachord, /1 2↑ 3 4/: hicaz, uzzal, şehnaz, nigriz, rahat ül-ervah, zengüle, sipihr and hisar. For sipihr an extra high range is needed (set horizontally right), while for hisar a further new trichord is needed, /1 2♯ 3/. As fig. 3 shows:

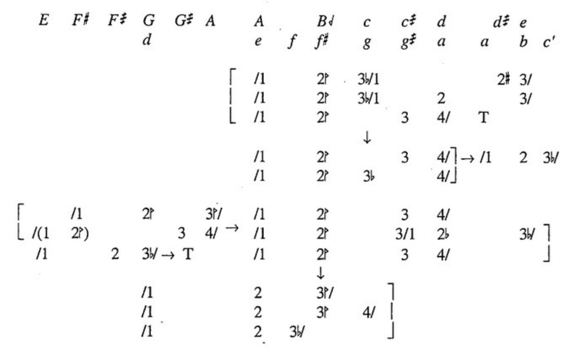

Figure 3

there is again a high degree of parallelism. Only in one case, the predictably marginal sipihr, do we find as many as two notes (*c* and *g♯*) that fail to be anchored to another by a consonant relationship, and of these *c* is stabilized by its pivotal position at the centre of a pentachord that divides into trichords.[499] Otherwise the nature of the moves from one element to another is similar to that already encountered, and given that the modes considered so far provide the expository material in some 260 pieces (which make up three quarters of the collection) it would seem reasonable to expect the same norms to obtain elsewhere too.

Scrutiny of the more common of the remaining modes[500] suggests that this is indeed the case. The only additional features worth noting are in some an increased reliance on successive trichords, and in others the extension of the semitone flexure, so that in addition to the previous /1 2↑ 3↑/ + S (=4↑) we encounter not only other trichords, /1 2↑ 3♭/ + S (=4♭) and /1 2♭ 3/ + S (=4), but also two tetrachords, /1 2↑ 3♭ 4/ + S (=5♭) and /1 2♭ 3♭ 4/ + S (=5♭). But both features are extensions of structures already encountered rather than radical departures, as is apparent from the later form of saba, which combines them, as shown in fig. 4. Elsewhere one may note trichordal parallelism in nişabur (/1 2 3♭/ + /1 2 3♭/), and further examples of the semitone flexure in beyati, arazbar and sünbüle, in the last of which it occurs in two positions.

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[499] A more extreme case appears to be provided by hicaz, where there are passages containing *f* in which there are three notes with no consonant relationship (*B*𝄳, *c♯* and *f*). However, *f* is here the highest pitch, and is best regarded as ancillary to *e* (its contexts of occurrence are, when not identical with an *e f e* flexure, typologically akin), and it is noteworthy that in those (sub)sections where the melody rises higher *f* is replaced by *f♯*, so that the number of notes without a consonant anchorage is reduced to one or, if *g♯* also appears, none.

[500] Those not yet discussed which are the main mode in three or more pieces are beyati, kürdi, mahur, nişabur, nühüft, pençgâh, saba and sünbüle.

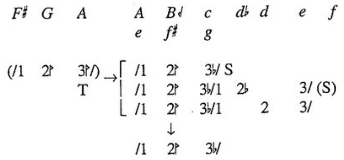

Figure 4

Excepting only a few marginal entities such as sipihr, the repertoire of modes thus appears to be dominated by modal structures utilizing a generally coherent set of basic building blocks organized, moreover, according to very straightforward principles of con-sonance. But as is clear from the previous discussions of individual modes, the regularities that have been observed here assume a stability that is in some respects a convenient fiction, and it is important not to lose sight of the fact that the synchronic cross-section, although broadly valid, inevitably fails to take account of certain trends and shifts which will eventually have the cumulative effect of producing further combinatorial possibilities. To refer again to saba, for example, it may be noted that the increasing use of *d♭* at the expense of *d* leads to a reduction in the number of consonant relationships,[501] and this is also the effect of introducing the trichord + S elsewhere, even if, as in ırak, it occurs only in certain contexts: in these cases the tendency to narrow an interval in flexures (just as with the preference for *F‡* over *F♯* as a leading note mentioned above) exemplifies a local melodic attraction more powerful than the pull of consonance, a countervailing force that points towards the emergence of a different set of norms.[502]

2.3.2.3 *Resource allocation*

The main concern of the above survey was to establish a number of major structural parameters, but when dealing with the way segments cohere at the modal level it did not attempt to look beyond what was attested and hence failed to account for the non-existence of certain other combinations which appear to be equally valid. For example, if we revert to Cantemir's core main-note category (but understood in the present context to include *F‡* and *f* as well as *F♯* and *f♯*) and consider a selection of modes with finalis *A*, we find the following disposition of segments in the mid and high registers (again displayed arbitrarily from low to high and therefore without implying any melodic direction or contour, and with major structural nodes indicated in bold):

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[501] What appears to be another clear diachronic shift resulting in a reduction in the number of consonant relationships is shown by the differing notations offered for pençgâh, but given the history of this mode it would be wise not to jump to conclusions.

[502] Such shifts are also to be seen as creating small-scale modulations which bring the modes in which they occur typologically closer to those, such as ısfahan, which are characterized by internal changes. These last will be discussed in 2.4.3, under the rubric of modulation.

uşşak	*G*	***A***	*B𝄳*	*c*	***d***	+	***d***	*e*	*f*		
baba tahir		***A***	*B𝄳*	*c*	***d***	+	***d***	*e*	***f♯***	*g*	***a***
arazbar		***A***	*B𝄳*	*c*	***d***	+	***d***	*e*	*f♯*	***g***	*a*
gerdaniye		***A***	*B𝄳*	*c*	***d***	+	***d***	*e*	*f♯*	***g***	
muhayyer		***A***	*B𝄳*	***c***	*d*	***e***	+	***e***	*f♯*	*g*	***a***

From this we can see that while there are four modes involving the same mid-range tetrachord they are not symmetrically paired or opposed in the high register, which suggests that there should be more possible combinations than are represented here. The addition of acem produces a mid/high pair with uşşak:

acem		***A***	*B𝄳*	*c*	***d***	+	***d***	*e*	***f***	*g*	***a***
uşşak	*G*	***A***	*B𝄳*	*c*	***d***	+	***d***	*e*	*f*		

and likewise hüseyni with muhayyer:

hüseyni	*F♯*	*G*	***A***	*B𝄳*	***c***	*d*	***e***	+	***e***	*f♯*	*g*	*a*
muhayyer			***A***	*B𝄳*	***c***	*d*	***e***	+	***e***	*f♯*	*g*	***a***

but there still remains a degree of imbalance between registers, for there are no comparable partners for arazbar and gerdaniye, and the lack of symmetry is even more pronounced if we take account of the low register, where we have only the following low/mid or low/high relationships:

uşşak aşirani		***E***	*F♯*	*G*	***A***	+	***A***	*B𝄳*	*c*	***d***	+	***d***	*e*	*f*		
uşşak				*G*			***A***	*B𝄳*	*c*	***d***	+	***d***	*e*	*f*		
acem aşirani		***E***	***F***	*G*	***A***	+	***A***	*B𝄳*	*c*	***d***	+	***d***	*e*	***f***	*g*	*a*
acem yegâhi	***D***	*E*	*F*	*G*	***A***	+	***A***	*B𝄳*	*c*	***d***	+	***d***	*e*	***f***		
acem							***A***	*B𝄳*	*c*	***d***	+	***d***	*e*	***f***	*g*	***a***

Even in the absence of any definition of what the limits of combinatorial permissibility might be, it can hardly be controversial to suggest that one feasible structure that fails to materialize is a similar low register equivalent of arazbar or baba tahir. But there are no doubt others, quite apart from various plausible mid/high pairings that are not attested.

If we turn for comparative data to the modes which have finalis *G*:[503]

salmak						***G***	*A*	*B𝄳*	*c*	***d***	*e*					
nihavent						***G***	*A*	*B♭*	*c*	***d***	+	*d*	*e*	*f*	*g*	
mahur	*D*	*E*	*F‡*	***G***	+	***G***	*A*	*B**	*c*	*d*	***e***	+	***e***	*f‡*	***g***	*a*
pençgâh						***G***	*A*	*B**	*c**	***d***	+	***d***	*e*	*f♯*	*g*	*a*
nigriz		*E*	*F‡*	***G***	+	***G***	*A*	*B𝄳*	*c‡*	***d***	+	*d*	*e*	*f♯*	*g*	
rast		*E*	*F‡*	***G***	+	***G***	*A*	*B𝄳*	*c*	***d***	+	***d***	*e*	*f♯*	*g*	
rehavi		*E*	*F‡*	***G***	+	***G***	*A*	***B𝄳***	*c*	***d***	+	***d***	*e*	*f♯*	*g*	

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[503] As before, * is used in pençgâh to combine the two possible intonations, and this usage is extended here to mahur, where both *B* and *B𝄳* occur.

we find that the distinctions are often straighforwardly ones of pitch set: nihavent, mahur and nigriz are always marked off as different from the remainder (and each other), and pençgâh sometimes (or optionally) so. In each of these cases it would be possible to hypothesize a complementary low or high equivalent. Considering just one in illustration, we find neither a mid/high nor a low/high pair involving mahur; and if we look beyond this particular group we fail to find any other mode incorporating the characteristic ***(d) e f♯ g (a)*** segment of mahur which, if maximizing the number of consonances within a scale were a prime consideration, could with equal justification have been combined with the hicaz tetrachord,[504] while an even higher number of consonant relationships would result from a combination with the core area of nişabur, thus yielding the pitch set *G A B c♯ d e f♯ g*. Further, even among those modes grouped together here where there is a congruence of pitch set (salmak, rast, rehavi and sometimes pençgâh), not only do we again find no exploitation of the potential of mid/high or low/high registral contrast to extend the number of possible combinations, there is not even any instance of the *G A B𝄳 c* tetrachord assuming structural importance: in all four cases it is the *G - d* pentachord that is the fundamental unit, and there is only the slightest hint of a triadic vs. non-triadic distinction (for which one needs to turn, essentially, to segâh and a shift of finalis).

For a further (and final) example of a group of modes which demonstrates that what might be perceived to be the combinatorial and registral potential of a system was not fully exploited we may turn away from the predominantly main-note modes and consider as a set the five modes characterized, in Cantemir's terminology, by the secondary note *c♯* (which therefore again include nigriz). Setting aside the different internal emphasis in the pentachordal core of zengüle as compared with those of uzzal and şehnaz, for present purposes we may provide a further schematic reduction using the terms H (the hicaz tetrachord), T (whole tone) and M (a main-note segment), with the more prominent elements again indicated in bold. We thus have:

nigriz	M[505]	**T**	**H**		M
hicaz			**H**	T	M H
uzzal			**H**	**T**	M H
zengüle	H.		**H**	**T**	
şehnaz			H	T	**H**

So viewed, the last two show a complementarity in the ways in which H can combine with itself in different registers (low + **mid**; mid + **high**), despite being not quite symmetrical in the distribution of their prominent zones. Again, hicaz and uzzal show a complementarity, if of a different form, both being statable as **mid** + high (with high = either M or H); and uzzal also forms a partially contrastive pairing with şehnaz (**mid** + high; mid + **high**). But neither in relation to hicaz nor to uzzal is there a corresponding mode in which a low-register

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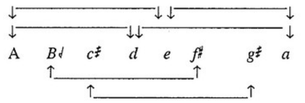
504 Where the gain of the *c♯ - f♯* fourth compensates for the loss of the *c - g* fifth.

505 *F♯* is again accorded main-note status.

tetrachord is of significance;[506] while in relation to nigriz there is no corresponding mode in which H appears in either the high or the low range.[507]

Rather more interesting than simply suggesting that this points to various unfulfilled possibilities is to observe that H only appears alongside M and/or itself, for it is on the basis of such distributional patterns that we may be able to establish a grid of hypothetical combinations that is more than just guesswork. For the combination of H with itself one may obviously appeal to consonance and parallelism and the resulting maximalization of perfect fourth and fifth relationships, as in e.g. şehnaz:



while in the combinations of H and M the link between *B𝄳* and *f♯* remains, as does, in nigriz, that between *c♯* and *F♯*. But there is no longer a link for *c♯* in the upper range, and in the absence of *F♯* or *G♯* it remains isolated, thus resulting in the one imperfect relationship allowed for in what appears to be emerging as a standard model. However, there are other possible pitch sets that fulfil the same requirement, a combination of H and mahur (*A B𝄳 c♯ d e f♯ g*), say, but fail to materialize. In this particular case one potential explanation is provided by Cantemir's hierarchy of main versus secondary notes, which prompts the suggestion that it might be acceptable for a secondary note to be so isolated but not a main note (in this instance *B𝄳*); but that this cannot be correct is demonstrated by modes such as uşşak and acem, where it is precisely *B𝄳* that does not stand in a consonant relationship to any other note. Alternatively, one might attempt to refine the previous observations about parallelism by invoking the metaphor underpinning the hierarchy, that of distance from a centre made up of elements based on main notes. Accordingly, H may be viewed as different (or distant) in just one degree from the main-note tetrachord /1 2𝄳 3♭ 4/, and likewise the *e f♯ g a* (=/1 2 3♭ 4/) element of mahur. Taking account of the possibility of H + H, this might suggest in relation to (*x*) main-note tetrachords and (*y*) tetrachords different in one degree the following criteria:

x can co-occur with x or y
y^a can co-occur with y^a but not with y^b

In addition, one would have to add the rider that the repetition $y^a + y^a$ has to be perceived to be such, thereby accounting for the non-appearance of a pitch set such as *A B c d e f♯ g*, where the *A B c d* (=/1 2 3♭ 4/) segment would be related to buselik rather than viewed as a lower register repetition of the identical sequence of intervals in mahur.

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506 The *G♯* in hicaz is to be viewed as a leading-note adjunct to finalis *A*, not as part of a low-register H.

507 However, only the latter can be regarded as a legitimate potential addition, for the former would require H to appear from *d*, and although there are one or two indications that this had begun to occur by the end of the seventeenth century it cannot yet be regarded as a standard feature, and H appears fundamentally only from *E*, *A*, *e* and *a*. (See the discussion of araban in 2.2.15: 63 *Marginalia*).

That such conclusions may be broadly correct is suggested by a comparison with the buselik-related modes. The buselik segment, with the secondary note *B*, typically occurs in the form of the *A B c d e* pentachord (which in most cases is best construed in terms of the trichords /1 2 3𝄳/ + /1 2 3/), and here too we find that the dominant pattern is for it to appear only in conjunction with the main-note tetrachord *e f♯ g a*. The alternative is that *f* appears in place of *f♯*, but *f*, it has been argued, can reasonably be assimilated to the main-note set; although another and perhaps preferable analysis is of a repeat of the buselik pentachord (*d e f g a*). Either way *f* has here the particular virtue of providing an extra perfect fourth so that there is now no pitch not anchored to another by a consonant relationship.

No other tetrachord type appears, and the only difference to the conclusions reached in relation to the hicaz group about combinatorial norms is that $y^a + y^a$ applies here specifically to the trichord /1 2 3𝄳/, and that otherwise *y* needs to be extended to cover pentachords and trichords as well as tetrachords. This appears to complicate matters excessively, for once trichords are admitted the number of possible combinations is vastly increased, and it becomes correspondingly less likely that the whole corpus can be accounted for by the basic conditions postulated so far. However, if we proceed on the basis that at this level of abstraction it is legitimate to reanalyse pentachords where possible in terms of tetrachord + wholetone matters still remain manageable,[508] despite the sacrifice of a certain degree of transparency (with two structures sometimes being collapsed into one).

In fact, given the disposition of intervals in the general pitch set the possible mid/high tetrachord pairings according to the criteria proposed are not particularly numerous. With /1 2↑ 3♭ 4/, for example, which can only appear on *A* and *e*, the sum total of possibilities is:

conjunct:	*A*	*B*𝄳	*c*	*d*		+	*d*	*e*	*f♯*	*g*	
							d	*e*	*f*	*g*	
		B	*c*	*d*	*e*	+		*e*	*f♯*	*g*	*a*
disjunct:	*A*	*B*𝄳	*c*	*d*		+		*e*	*f♯*	*g*	*a*
								e	*f*	*g*	*a*
								e	*f♯*	*g*𝄲	*a*
	A	*B*𝄳	*c*𝄲	*d*		+		*e*	*f♯*	*g*	*a*
	A	*B*	*c*	*d*				*e*	*f♯*	*g*	*a*

However, these still include one (*B c d e f♯ g a*) that fails to occur, to which there are two possible responses: either to say that this is indeed an empty slot on the hypothetical grid that one might eventually expect to see filled; or to seek a reason why it should not occur. Both are logically unpalatable, the former because it depends on the unwarrantable assumption that the rules of the system have been discovered, the latter because it invites a host of special *ad hoc* conditions. Thus while it is pertinent to observe that finalis *B* is exceedingly rare, being confined in fact to nişabur, it is hardly legitimate to conclude that it might not otherwise be allowable. However if, on the basis of the fact that a given tetrachord does not appear in the corpus in a certain position theoretically allowed for by the pitch set (e.g. /1 2 3 4/ from *e* or /1 2♭ 3♭ 4/ from *c*), it is legitimate to assume that the putative rules of the system should incorporate observed distributional restrictions, then the problematic combination *B c d e f♯ g a* can happily be excluded.[509] Accordingly, the possible combinations not included above with /1 2 3↑ 4/, which can only appear on *G* and *d*, are as follows:

conjunct:	*G*	*A*	*B*𝄳	*c*		+	*c*	*d*	*e*	*f*	
		A	*B*𝄳	*c*𝄲	*d*	+		*d*	*e*	*f♯*	*g*
disjunct:	*G*	*A*	*B*𝄳	*c*		+		*d*	*e*	*f♯*	*g*
								d	*e*	*f*	*g*
	G	*A*	*B*	*c*		+		*d*	*e*	*f♯*	*g*

and all can be said to occur, even if not necessarily as independent entities.[510] Unfortunately, though, the range of possible $y^a + y^a$ combinations shows that descriptive adequacy has still not been attained, for several are unattested, and others are distinctly marginal. What appears to be the case is not that there is a rule of exclusion in operation but rather a distinct preference for combinations where at least one of the tetrachords contains neutral intervals, such that:

> $y^a + y^a$ combinations of the tetrachords /1 2♭ 3♭ 4/, /1 2 3♭ 4/ and /1 2 3 4/ are generally avoided, and where they occur are marginal

In the mid range, especially, they occupy the fringes where we also encounter /1 2↑ 2 4/ and the other rare specimens displayed in 2.2.15: 62 and 63. But in the low range the situation is rather different, and in broad terms one may note a contrast with the highest range (above *g* or *a*), where main-note tetrachords predominate. That they fail to do so in the low range may be attributed in part to the preference for *F*𝄲 over *F♯* in modes with finalis *G*, but whatever the cause we encounter a relationship between the low and mid ranges that fails to echo that between the mid and high ranges. The difference, however, is not such as to invalidate the previous attempt to discern whatever criteria might govern the various combinations of segments in the mid and high ranges, the most obvious reason being that whereas these occur in all modes with a pitch set spanning more than a fifth, the low range does not, so that it may be regarded as ancillary, an area of optional melodic extension which only occasionally becomes sufficiently important to contain within it the finalis, and even then the nomenclature will more often than not point to the mode in question being a secondary or parasitic entity.

There are, in fact, four explicitly related pairs the members of which are differentiated primarily by the position of the finalis: buselik and buselik aşirani, acem and acem aşiran, acem and acem yegâhi, and uşşak and uşşak aşirani (with huzi aşiran being subsumed, in the absence of huzi, under buselik aşirani). Invoking in relation to the lower mode of such pairs the term 'plagal' they may be displayed as follows:

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[508] One case where it is not possible is hisar, although with just one note not standing in a consonant relationship with another there is nothing untoward about the sequencing of its constituent segments.

[509] As an exception that does occur one may note *A B*𝄳 *c d* + *d e♭ f g*, which appears in only in karciğar (in beyati *e♭* may be accounted for differently) and presents another instance of a marginal phenomenon which might nevertheless prefigure later developments.

[510] That is, if the penultimate combination is viewed as a variant of the first (or vice versa), and the last as being comprised within buselik. Implicit in this reading is that the level of abstraction here is such that the possibility of dividing a given pitch set into either conjunct or disjunct tetrachords is merely fortuitous and is not to be correlated with a variable locus of prominence and hence different surface structures.

basic form: buselik											
				A	B	c	d	**e**	f♯	g	a
plagal form: buselik aşirani											
		E	F♯	G	**A**	B	c	d	**e**	f♯	g	a
basic forms: acem, uşşak											
				A	B𝄳	c	**d**	e	**f**	g	a
			G	**A**	B𝄳	c	**d**	e	f		
plagal forms: acem aşiran, acem yegâhi, uşşak aşirani											
		E	**F**	G	**A**	B𝄳	c	**d**	e	**f**	g	a
	D	E	F	G	**A**	B𝄳	c	**d**	e	**f**	g	a
		E	F♯	G	**A**	B𝄳	c	**d**	e	f		

Table 2

Except for the version of acem aşiran which has finalis *F*, the interval between the higher and lower finalis notes is always a fourth or a fifth, but although the octave above the plagal finalis is always satisfactory according to the consonance criteria suggested above as normative there is no instance of the tetrachordal parallelism which could have been achieved in buselik aşirani and acem aşiran by the use, respectively, of *F*𝄲 and *F*♯: it is only in uşşak aşirani that repetition at the octave gives way to parallelism within it, which suggests that the previously observed preference for parallelism may have been range specific.

basic form: rast (rehavi, pençgâh, salmak)											
			F𝄲	**G**	A	B𝄳	c	**d**	e	f♯	g
plagal forms: 1. included in the above; 2. nühüft:											
	D	E	F𝄲	**G**	A	B𝄳	c	**d**	e	f♯	g
		E	F♯	**G**	A	B𝄳	c	**d**	e		
basic form: neva (gerdaniye, baba tahir)											
					A	B𝄳	c	**d**	e	f♯	g	a
plagal form: ırak, eviç[511]											
			F♯	G	**A**	B𝄳	c	**d**	e	**f♯**	g	a
basic form: segâh (bestenigar, maye)											
			F𝄲	**G**	A	**B𝄳**	c	**d**	e	f♯	
plagal form: ru-yi ırak											
			F♯	**G**	A	**B𝄳**	c	**d**	e	f♯	g

Table 3

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[511] To which could be added a further notional plagal form with *F*♯ and finalis *E*. This is neva-yi aşiran, unattested in the collection but mentioned in the discussion of 20. nühüft.

Although it is only in the modes listed in table 2 that the nomenclature signals recognition of a derivational relationship it may be suggested that others could be looked at in a similar light, either internally, pointing to the varying registral emphases that different pieces in them may exhibit, or externally, in the form of analogous pairs, and table 3 above presents a similarly formulated restatement of possible connexions between some of the most important modes (and their satellites) that inhabit the (adjusted) series of main notes. The only difference of any significance between the two sets is that in the second the plagal finalis is more frequently a third lower. The implied shape of the display in table 3 is that of a scroll or loop, with a successive rise in the finalis of the first member of each pair that would with the next step upwards, to *c*, fold back to its beginning:

basic form: çargâh										
		G	A	B𝄳	**c**	d	e	f/f♯	g	a
plagal form: rast										
	F𝄲	**G**	A	B𝄳	c	**d**	e	f♯	g	

But rather than dismiss this last step as purely notional one might usefully regard it as an inversion or reversal of a derivation of which çargâh is the second term, arrived at by a shift of finalis up a fourth. Thus viewed, one may note an internal consistency between this pair and those listed in table 3: the primary member is in each case a mode with prominent *d*, a feature emphasized by there being no plagal counterpart to the most common makam of all, hüseyni, which has prominent *e*. But such a striking void makes it clear that although the relationship between the modes so linked is of some importance, it is restricted to certain areas, and cannot be thought of as a structural feature of general validity;[512] and it is also significant that among those noted the plagal or derived members of the set, with the sole exception of ırak and eviç, are less important, and in some cases marginal.

At this point we may properly return to Cantemir himself and relate the above, even if at a tangent, to his own discrimination between low and high register modes (such as ırak and eviç). But although pertinent beyond the domain of the particular makams he assigns to these categories, the high/low contrast also fails to constitute a binary opposition of universal validity. Thus rather than pursue the attempt to break the corpus down systematically into contrastive but complementary groups one might conclude by pointing to the unity that can be discerned even behind such a basic distinction into essentially oscillating or descending forms of melodic organization, a unity captured by Cantemir in his emphasis on the finalis as that crucial element which ultimately clinches modal identity. With the rarer oscillating pattern it would sometimes be possible to speak of horizontal (i.e. retrograde) symmetry, but even here, as in a few other modes, such as rast and uşşak, where the beginning of the exposition may revolve around what will eventually become the finalis, there is always what may be termed a telic structure involving a goal-oriented final descent, and in the majority of cases the primary nodes of melodic elaboration are on pitch above the finalis, so that even if a leading note is incorporated into the cadence area the general dynamic of the closure is a descending movement.

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[512] The only others that could be added are zirefken and büzürk (again as plagal partners of buselik), but the fit is less good, especially when patterns of prominence are taken into account. They do, however, raise the question of why so many of the low-register modes should have pitch-set features, notably the inclusion of *B*, in common with buselik.

2.3.3 *Cadences*

In general, cadences are based upon to a small set of supra-modal formulae, although in a few instances it is possible to demonstrate an association between a particular mode or group of modes and a particular formula. There are one or two examples of a concluding upward leap but, as is clear from the preceding discussion, we find a descending movement in the overwhelming majority of cases. Considering only the steps involved (i.e. without regard to the size of the intervals between them), this can be reduced to two fundamental types, one in which there is no further activity after the finalis has been reached, the other in which there is a succeeding element of elaboration.

The first consists essentially of:

5 4 3 2 1 (which is relatively rare)
4 3 2 1 (with the common variant 4 2 1)
3 2 1

to which various supplementary (and normally adjacent) steps are often added, as well as supplementary attacks. Ignoring the latter, the following types of amplification may be noted:

(4) 3 4 3 2 1
(4) 3 2 3 2 1
(4) 3 2 $\underline{7}$ 1
4 5 3 4/1 2 3 1
4 2 3 1 2 $\underline{7}$ 1
3 2 3 1 2 $\underline{7}$ 1

The second continues on from the above, again generally using adjacent steps, and has as its normal limits 3 and $\underline{6}$. Among the more common shapes are:

$\underline{7}$ 1
2 1
$\underline{7}$ 2 1
2 $\underline{7}$ 1
2 1 $\underline{7}$ 1
2 1 $\underline{7}$ 1 2 1 $\underline{7}$ (2) 1
(31 2 $\underline{7}$ 1) 212 $\underline{7}$ 1
$\underline{7}$ $\underline{6}$ $\underline{7}$ 1 (2 1)
2 1 2 3 1
2 (32) 1 $\underline{7}$ 1
32 (32) 1 $\underline{7}$ $\underline{6}$ $\underline{7}$ 1

In broad terms one may note that the straightforward descending approach 4 (3) 2 1 is

preferred in modes with finalis *A*, whereas in those with finalis *G* there is a tendency to include $\underline{7}$ (=*F*♯), extensions such as $\underline{7}$ $\underline{6}$ $\underline{7}$ 1 and (31 2 $\underline{7}$ 1) 212 $\underline{7}$ 1 being common. But the distribution is not even: the latter, for example, is frequent in mahur and rast, but does not appear in pençgâh and nigriz; and whereas the straightforward descent to *A* dominates in uşşak and beyati there is much greater variety to be found in saba, acem and hüseyni.

2.4 *Modulation*

During the exposition most modes may be characterized as simplex structures in the sense that they employ just one element within each range, but a few are complex, containing a transition from one pitch set to another. Although sufficiently important to be given their own names they are also perceived as derivates of pre-existing entities, and to that extent can be described as conventionally fixed modulatory combinations, while the fact that for a number of modes Cantemir specifies which others formed a related modulatory family suggests that conventions could also affect the transition from one mode to another. It is evident from the earlier discussion of individual makams that the incorporation in a given composi-tion of one or more modulatory passages extraneous to whatever was determined by the structure of the principal mode was, if not obligatory, certainly standard practice, and the question therefore arises of what patterns of modulation might be detected in the corpus as a whole.

Modulation is sometimes effected without altering the pitch set—by a redistribution of patterns of salience, a change of finalis, appeal to particular melodic formulae, or a combination thereof. More frequently, though, it involves a switch of at least one basic unit to another at the same pitch level, and consequently at least one substitution (or deletion) within the pitch set, in which case the parallelism possible in combinations between registers within a mode is not matched by identity between the modulatory partners. But if this necessarily involves a higher average level of contrast it might still be thought that the stable internal structure of most (and certainly the most important) modes, characterized as it is by minimal internal differentiation, presupposes an aesthetic which would prefer modulatory transitions to adhere as closely as possible to the same norms, especially as the avoidance of dissonant relationships in modulating is something that Cantemir explicitly commends. On the other hand, as it is precisely (and only) as modulatory (sub)sections that we encounter the most unusual species in the modal menagerie it could also be argued that they demonstrate the potential for a contrary aesthetic to be brought into play, with modulation providing an area of dynamic contrast within which unexpected juxtapositions might be cultivated and normal conventions suspended or subverted.

The poor match between what Cantemir's various family groupings imply and what actually occurs points, if anything, towards the latter possibility, and suggests a considerable degree of fluidity. Indeed, freedom of choice seems to be the principle underlying the lack of any evident pattern of modulation in certain modes, to which may be added the contrasting possibilities represented by compositions where there is no apparent modulation at all as against others with more than one and occasionally several modulatory passages. But one may still start with the hypothesis that when modulating composers were likely to follow certain well-worn grooves, whether personal or, more likely, collective, and to the extent that these can be traced modulation may be considered as a general reflection or, better, manifestation of particular relationships constitutive of the modal system as a whole from which certain conclusions may be drawn not only about structural features but also about preferences and, hence, aesthetics. In any event, whether or not it is possible to discern some kind of pattern to modulation, its importance as a phenomenon is clear: despite being absent from a few pieces it is apparent that, either integrated within the very structure of a mode or a more general feature of compositional strategy, modulation was endemic, so much so that it could actually provide the complete substance and *raison d'être* of two instrumental genres, the large-scale külliyat and its improvised equivalent, the modulatory taksim.

2.4.1 *taksim*

We are fortunate, in considering these genres, to have some explicit and this time surely reliable guidance from Cantemir himself, and it is here that we may begin. The passage in question does not, however, directly address the fundamental questions, adumbrated above, that are suggested by the notated corpus: it is concerned not with the norms controlling the amount, nature and optimal positioning of modulatory material in a peşrev or semai, either generally or specifically in such-and-such a mode, but rather with the taksim.[513] It follows a complex discussion of modal affinities and clashes which is illustrative of a single underlying principle, that of the primacy of consonant relationships, and informs us that master musicians can combine modes into a golden chain with such finesse that potentially dissonant clashes are avoided[514] and, further, that such skills are exhibited in the külli külliyat peşrev form, in the equivalent vocal *kâr-i naṭıḳ*, and in the improvised taksim, although Cantemir hastens to add that there were only one or two musicians capable of bringing off the type of taksim (*taḳsīm-i küllī*) that ranged over a large number of modes.

He then proceeds (pp. 63-7) to give a detailed model outline of how a taksim could be organized to provide a comprehensive modulatory sequence. The representation of this in table 4 must be regarded as an approximation, since there is often no precise indication of the range over which a given mode might be developed before moving on to the next, but it provides neverthess some insight into the ways in which transitions were effected. Overall it is clear that the sequence obeys the general principle of avoiding dissonant relationships in moving from one mode to the next: it therefore conforms to Cantemir's prescriptions, and can be adduced in support of the argument for conformity rather than subversion. Transitions are for the most part extremely smooth, proceeding either by shifts of prominence and register within the same pitch set (as in the initial 1→2→3) or by making just one change to the pitch set (as in the following 3→4→5→6), and if we accept that there was no difference in pitch between the *d♭* of saba and the *c‡* of uzzal it is not until 11, with the move from hisar to buselik, that we encounter anything more abrupt. Also to be noted are the blocks of modes sharing similar features (as in the 29→30→31 sequence, all three containing an element of saba) and of those with the same finalis or, more precisely, the distribution of those modes

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513 For a wide-ranging and informative discussion of the nature and historical development of this form, including extensive analysis of the relevant passages in the *edvār*, see Feldman, op. cit., pp. 274-99.

514 p. 62: كامل اهل موسيقار اولان قوت علم موسيقى ايله جمله مقاملرك وپرده لرك ما بيننده اولان عداوت وبرودتى طريق امتزاج وموافقتده داخل ايتدره بلور ، اوله كه اوضاع اجرام پرده ها زرين زنجير كبى برى برنه كيروب .

(NB: A note in roman is one verbally specified by Cantemir or clearly implied by his wording. Prominent notes are in bold. The finalis, where specified, is underlined; the initial, where specified, is indicated by an arrow. Where both an ascending and descending motion is specified separate lines may be given, the position of initial or finalis indicating the direction.)

1. hüseyni				→$\underline{\mathbf{A}}$	*B𝄳*	c		d	**e**	f♯	g	*a*			
2. neva				→A	B𝄳	c		**d**	*e*	*f♯*	*g*	*a*			
3. muhayyer								d	e	f♯	g	**a**	*b𝄳*	*c'*	*d'*
4. sünbüle												a	b♭	c'	d'
5. acem				**A**	B𝄳	c		**d**	e	**f**	g	a→b♭			
6. saba				**A**	B𝄳	**c**	d♭		→e						
7. uzzal				*A*	*B𝄳*		*c‡*	*d*	***e***						
8. hicaz				*A*	*B𝄳*		*c‡*	***d***	*e*						
9. şehnaz				*A*	*B𝄳*		*c‡*	*d*	$\underline{\mathbf{\textit{e}}}$	*f♯*	g‡	***a***			
10. hisar								d‡→	$\underline{\text{e}}$[515]	*f♯*	*g‡*	*a*			
11. buselik				$\underline{\mathbf{A}}$	B	*c*		*d*	→**e**						
12. buselik aşirani	$\underline{\text{E}}$	F♯	G	**A**	B	**c**		d	→**e**						
13. acem aşirani[516]	→E	F♯	G	**A**	B𝄳	c		**d**	e	**f**					
		$\underline{\text{F}}$	G	A	B𝄳	c									
14. kürdi[517]				→A	B𝄳	c		d	e						
				$\underline{\text{A}}$	B♭	c		d	e	**f**					
15. nihavent			$\underline{\text{G}}$	→A	B♭	c		**d**	e	f					
16. rast			$\underline{\mathbf{G}}$	A	B𝄳	c		**d**	e	f♯	→g				
17. mahur			$\underline{\mathbf{G}}$	*A*	B	*c*		*d*	*e*	f‡	→g				
18. arazbar				$\underline{\text{A}}$	*B𝄳*	*c*		*d*	*e*	**f**	→g				
19. baba tahir[518]				→A	B𝄳	c		d	e	f	g	a			
								$\underline{\text{d}}$	e	f♯	g	a			
				$\underline{\mathbf{A}}$	B𝄳	c		**d**							
20. uşşak			→G	$\underline{\mathbf{A}}$	B𝄳	c									
21. beyati				→$\underline{\mathbf{A}}$	B𝄳	c		**d**	e♭	f	*g*	*a*			
22. şedd-i beyati									*e*	*f♯*	*g*	→a	b♭	*c'*	*d'*

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515 The transfer from şehnaz is effected by making a suspended cadence (asma karar) on *e* (which thus becomes both its finalis and the initial of hisar), and then introducing *d‡*, and *e* is similarly the point of transfer from hisar (and hence its finalis) to buselik. It is not clear from the text whether the lower register of hisar would be explored.

516 The definition is in two parts: an ascent followed by a descent specifically from *c*.

517 The definition is in two parts: an ascent like hüseyni followed by some play on *f* and a descent including *B♭*.

518 The definition is in three parts: an ascent to *a*; a descent on main notes to *d*; a further descent as in beyati to *A* (thus implying possible use of *e♭*).

23. **eviç**[519]									*e*	**f♯**	*g*	*a*				
24. **ırak**			**F♯**	G	**A**	B𝄳	c	**d**	e	→**f♯**						
25. **çargâh**							c	d	e	→f♯	g	a	b𝄳	**c'**		
26. **şedd-i segâh**[520]								*d*	*e*	*f♯*	*g* →	**a**	*b𝄳*	*c'*	*d'*	e'
										f♯	*g*	*a*	*b𝄳*	*c'*	*d'*	e'
27. **geveşt**				G	A♯	B𝄳	c‡	*d*	*e*	→f♯						
28. **rahat ül-ervah**[521]			F♯	G	A♯	B𝄳	c‡	*d*	*e*	→f♯						
29. **ısfahan**[522]					A	*B𝄳*	c‡	→d								
					→A	*B𝄳*	c	*d♭*								
30. **muhalif ırak**[523]					A	*B𝄳*	c‡	→d								
			F♯	*G*	→A	*B𝄳*	c	*d♭*								
31. **sultani ırak**[524]			→F♯	*G*	A	*B𝄳*	c‡	d								
					A	*B𝄳*	c	*d♭*								
32. **bestenigar**						**B𝄳**	c	**d**	e	→**f♯**						
33. **rehavi**[525]	D	*E*	F‡	→G												
	→D	*E*	*F‡*	**G**	A	B𝄳	c	**d**								
34. **nişabur**						B	c‡	→**d**	*e*	*f*	*g*					
35. **pençgâh**[526]				**G**	*A*	B	c‡	→**d**	*e*	*f♯*	*g*					
36. **zengüle**				→G	A	B𝄳	c	d								
			F♯	G‡	A	*B𝄳*	c‡	→d								
37. **hüzzam**							c‡	d	e	→f						
38. **hicaz**[527]					**A**	*B𝄳*	*c‡*	*d*	*e*							
39. **kuçek**				→G	A	B𝄳	c	d	e	f♯	g	**a**	*b𝄳*	*c'*	*d'*	
					A	*B𝄳*	c		e							
40. **hüseyni**[528]					**A**	*B𝄳*	*c*	*d*	*e*							

Table 4

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519 **The** text here is a little puzzling. The onset of şedd-i beyati is precisely defined, but not its range (although beyati can be transposed *in toto* up a fifth). We are then told straightforwardly that a suspended cadence on *f♯* signals a shift to eviç, but this is followed, oddly, by the remark that eviç is shown by repeating the same movement; and the following descent to finalis *F♯* is defined not as eviç but ırak.

520 **The** text specifies beginning like muhayyer (so that *a* might, strictly speaking, not be initial), and then descending after reaching *e'*, and showing a transposition of segâh by dwelling on *f♯* (which is not, though, explicitly defined as the finalis).

521 **Succinctly** described as a repetition of geveşt but with finalis *F♯*.

522 **Defined** as an initial descent to *A* followed by a saba-like ascent to *c* and a return to finalis *A*.

523 **Succinctly** described as a repetition of ısfahan but with finalis *F♯*.

524 **Described** as having initial *F♯*, then beginning like ısfahan and having finalis *A*, so that the presence of the saba element of ısfahan is not certain.

525 **Described** as a descent to *D* followed by an ascent to *d* and a final descent to *G*.

526 **Succinctly** described as a repetition of nişabur but with finalis *G*.

527 **Oddly** defined as a melodic movement in the manner of uzzal.

528 **The** description of the last two is rather telescoped: after the ascent and return to *e* that of kuçek ends with mention of the characteristic *e* - *c* jump, after which arrival at finalis *A* is said to signal hüseyni.

the finalis of which is not *A* against the background of the more numerous modes in which it is. We thus find that the two modes with *E* and *F* as finalis are juxtaposed (12, 13), as are the three with *G* (15, 16 and 17). The 16→17→18 transitions are rather less smooth, with in each case two alterations to the pitch set (as well as a change of finalis in 18 back to *A*), but there is a strong unifying element nevertheless, all three having initial *g*, and the following sequence 18→19→20→21 is again characterized by minimal differentiation.

The second half, however, exhibits rather greater variety with, as far as can be discerned from Cantemir's outline, a fluctuating emphasis on different registers. Thus from the low register of 20 we arrive, through a sudden change of gear effected by transposing beyati, to a high register block not dissimilar in effect to H2 in a peşrev (interrupted, however, by the descent in 22 upon the first mode with the low finalis *F♯*). It is also interesting to note that the high register block concludes with a transposed mode,[529] and contains an upper octave version of çargâh markedly different from its manifestations in the collection. Thereafter we encounter further contrasts, with two modes with initial *f♯* followed by an ısfahan-based group of internally complex modes (29 to 31), so that it is here that the phenomenon of modulation appears in its most compressed form, and what might be perceived as a degree of tension is maintained thereafter by quickening the pace of finalis change, *F♯* being followed rapidly by *A*, *B𝄳*, *G*, *B*, *G*, *A* and, rarest of all, *c‡* before the final group on *A* is reached, a transition through hicaz leading to an ascending flourish that re-establishes the main-note set followed by kuçek, which in turn leads gently and seamlessly back to the mode with which the whole taksim began, hüseyni. It could therefore be argued that although the dominant principle is indubitably that of minimal differentiation and smoothness of transition, space is nevertheless allowed for greater friction and heightened contrast, and it might further be hypothesized that the positioning of the affected area just before the final cyclical return is not a matter of chance. At the same time, it should be noted that the rarer terkibs mentioned in the *edvār* but nowhere cited in the collection are studiously avoided. Cantemir's extensive blueprint thus provides no evidence to support the notion that the natural habitat of terkibs not attested in the notations was the taksim.[530] At the same time, it cannot be said to disprove it: it is quite possible that in striving to be exemplary he deliberately played safe.

2.4.2 *külliyat*

Similar patterns occur in 296, the külliyat piece most comparable in scope to the taksim. It has, indeed, an even larger total of 45 modulations. As may be seen from Table 5, which displays the pitch set(s) occurring in each successive mode in H1, the basic organizational principle is, again, to prefer transitions that require minimal change. Even those modes that themselves exhibit internal changes of pitch set are placed so as to stress continuity: thus the new element in 2 is introduced after an overlapping passage, while in the more complex 5 the

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529 As has been noted, there are a number of subsections in the collection that are transpositions of others, so the principle is familiar. What is striking here is that, saving error, there are no other instances of these particular transpositions. But given that the transposition of segâh implies an oscillating development of the *d* - *f♯* - *a* pentachord, it is not immediately apparent how it was to be distinguished from eviç if shorn, as here, of its concluding descent to finalis *F♯*.

530 Feldman, op. cit., p. 293.

(NB: As before, the finalis is underlined, prominent notes are in bold, and the initial is indicated by an arrow. Only those pitches actually used are included.)

1. hüseyni	E			→ A			c		**d**	e		f♯	g	a	
2. şiraz						B		c𝄲	d	→ **e**		f♯	g	a	
3. terkib-i mülâzime								c𝄲	**d**	**e**		f♯	**g**	→ **a**	
4. uzzal				A	B𝄳			c𝄲	→d	e		f♯			
5. ısfahan				→ **A**	B𝄳		**c**	d♭							
								c𝄲	d	e					
				A	B𝄳		**c**	d♭							
6. saba				**A**	B𝄳		→**c**	d♭		e	f				
7. kuçek			G	**A**	B𝄳		**c**			**e**		→f♯	g		
8. zirgüle	E			G𝄲 →**A**	B𝄳		**c**								
9. buselik				**A**		B	c		→**d**	e					
10. büzürk	**E**	F♯	**G**	A		B	→c		d						
11. buselik aşirani	**E**	F♯	G	**A**		→B	c		d	e					
12. zirefken	→**E**	F♯	**G**	**A**		B	c		d	**e**		f♯	g	a	b𝄳

Table 5

middle section echoes the pitch set of 4 while that of the final section continues into 6. Again as in the taksim, a group of modes with finalis *A* (4 to 9) is followed by another (10 to 12) with finalis *E*, and there are also patterns of continuity in the position of prominent notes.

Nothing in the remainder of the piece violates the norms that have been observed so far. H2 is dominated by modes with finalis *A*, and the sequence with which it begins, neva→baba tahir→arazbar→uşşak→beyati is reminiscent of arazbar→baba tahir→uşşak→beyati in the taksim. Beyati is followed by the only other mode with the same pitch set, karcığar, and nihavent and kürdi are likewise placed together; and for similar reasons of modal propinquity we find zengüle→hüzzam→hicaz in the taksim matched by hicaz→şehnaz→hüzzam at the onset of H3, while nişabur is again followed by pençgâh. In H4 we find that ırak and eviç are again juxtaposed, and the following rahat ül-ervah→muhalif ırak→ısfahan-ırak→sultani ırak sequence bears a strong resemblance to the rahat ül-ervah→ısfahan→muhalif ırak→ sultani ırak of the taksim blueprint. The finalis changes rather more frequently in H3, but there is nothing random about the arrangement, whereby successive groups on *A*, *B*𝄳 and *G* are each followed by one or two less common ones; H4 is even more tightly organized, with just two groups, one on *F*♯ (or *f*♯) followed by another on *A*. The general impression created by 296 is thus of a very carefully calibrated set of moves designed to ensure maximum smoothness of transition.

The picture presented by 22, a somewhat older piece also included by 'Alī Ufḳī, is rather more varied. As may be seen from Table 6, which gives the material appearing in H1, M and H2, the initial pace of change, if measured by alterations to the pitch set, is rather leisurely, so that the impression created is of a paradoxical combination of movement and stasis: the only variation occurring between 1 and 7 is the alternation of *f* and *f*♯. Thereafter, however,

1. hüseyni			G	→A	B𝄳		c		d		e		f♯	g		a	
2.											→ e		f♯	g		**a**	
3. [531]				A	B𝄳		**c**		d		→ e	f					
4.				→A	B𝄳		**c**		d		e		f♯	g		a	
5.				A	B𝄳		c		d		e	→**f**		g		a	
6. kuçek[532]	E	F♯	G	A	B𝄳		**c**				e	→**f**		g			
7. safayan				A	B𝄳		**c**		→**d**								
8. hüseyni-buselik				A		B	c		d		→ **e**						
9. aşiran	E	F♯	G	→A	B𝄳		c										
10. şiraz											→ e		f♯	g		**a**	
11. hisar							c			d𝄲	→ e		f♯		g𝄲	a	
12. acem-buselik			G	A		B	**c**		d		→ e	f					
13. şiraz ve sünbüle											e		f♯	g		→ **a**	b𝄳
14. [533]								c𝄲	d		e	→f					
													→**f𝄲**	g		a	
													f𝄲	g		a	→b♭
											e		f♯	g		→a	b♭
15.											e		f♯	g		a	→**b𝄳**

Table 6

there are some more abrupt shifts, particularly in the latter part of H2, where the changes from 10 to 15 generally involve two alterations to the pitch set, and even greater contrasts occur in H3, which introduces otherwise rare isolate species and even juxtaposes two of them, so that we have:

H3e	→F♯	G	**A**	B𝄳	c	d	e							
H3f								e♯ → f♯	g𝄲	**a**	b♭			
								f𝄲	g𝄲	a	→b♭		c′	
H3g[534]										→**a**	b𝄳	b		d′

The evidence of this piece might therefore be interpreted as suggesting that while the principle of minimum or at least low-level differentiation that constitutes for Cantemir an aesthetic norm was clearly important, what by this criterion must be regarded as quite dissonant juxtapositions were by no means excluded from the compositional palette of the first half of the seventeenth century. At the same time, almost as if in compensation, one may note that the pattern of finalis notes is extremely static, the domination of *E*, *A*, *e* and *a* being such that they account between them for 22 of the 26 subsections.

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[531] Omitting *g f*♯ descent in last cycle.

[532] Omitting as incidental the one brief appearance of *d* in Mg2.

[533] Each of the four cycles is entered as a separate unit.

[534] Omitting the penultimate *b*♭.

The remaining külliyat piece, 23, also contains terkibs based on isolate species, and on that basis one might hypothesize that its compositional strategy is more likely to resemble that of 22 than 296. Rather shorter than the others, its complete contents are:

H1[535]					$\underline{A}$	*B*𝄳	→**c**	*d*	***e***	*f*♯	*g*				
Ma				*G*	→$\underline{A}$	*B*𝄳	*c*	*d*	*e*	*f*					
Mb[536]				*G*	$\underline{A}$	*B*𝄳	**c** *d*♭		→*e*						
Mc			*F*♯	*G*‡	→$\underline{A}$	*B*𝄳	*c*‡	*d*							
H2a				*G*‡	→$\underline{A}$	*B*𝄳 *B*		*d*	*e*						
H2b				*G*‡	$\underline{A}$	*B*𝄳	*c*‡	→***d***							
H2c							$\underline{c}$	*d*	→***e***	*f*		*a*			
H2d[537]					$\underline{A}$	*B*𝄳	*c*	*d*	*e*	→*f*♯	*g*				
H2e=Ma				*G*	→$\underline{A}$	*B*𝄳	*c*	*d*	*e*	*f*					
H3a					$\underline{A}$	*B*𝄳	***c***	→***d***	*e*						
H3b	$\underline{D}$	*E*	*F*♯	*G*	→***A***	*B*♭									
H3c					$\underline{A}$	***B***	→*c*	***d***	***e***						
H3d									*e*	*f*‡	→***g***	*a*	*b*𝄳		
H3e										$\underline{f}$♯	*g*	*a*	→*b*𝄳	*c'*	*d'*
H3f					$\underline{A}$	*B*𝄳	*c*	→***d***	*e*	*f*					
H4a				*G*‡	→$\underline{A}$	*B*𝄳	**c** *d*♭		*e*						
H4b				$\underline{G}$	*A*	→***B*𝄳** *B*									
H4c[538]									*e*	*f*‡	→***g***				
								$\underline{d}$	*e*	→*f*♯	*g*	*a*			
H4d								$\underline{d}$	*e*	→***f***	*g*	*a*			
H4e					$\underline{A}$	***B*𝄳**	*c*	→***d***	*e*						
H4f[539]						*B*	$\underline{c}$‡	→***d***							
					$\underline{A}$	*B*𝄳	*c*	*d*	*e*	→*f*					
H4g							→*c*	*d*‡	$\underline{e}$	*f*♯	*g*‡	*a*			
H4h					$\underline{A}$	*B*𝄳	*c*	*d*	*e*	→*f*♯					

Table 7

Compared with 22, the pattern of finalis notes is in some ways even more rigid, for instead of a concentration on the interrelated set *E*, *A*, *e* and *a* we find that *A* alone predominates, appearing in 15 of the 23 subsections: there is, unexpectedly, no example of *E*, nor of *a*, and it is not until H2c that any other note appears (in the event *c*). However, H3 and H4 are marked by greater variety, and include subsections ending in *D*, *G*, *d*, *e*, *f*♯ and *g*, although with an evident pattern in H4 based on fifths, *G d d* being followed by *A A e A*. Organized with at least equal care is the way in which the area between *e* and *g* is filled in H3d-f (*f*‡→*f*♯→*f*) and from H4c on (*f*‡→*f*♯→*f*→*0*→*f*→*f*♯), and given such indications of conscious compositional craft, particular importance accrues to the evidence of contrast provided by registral shifts and discontinuities, generally in H3 and especially from H4b to H4c, where there is not a single pitch held in common. Pitch-set changes, on the other hand, are generally orthodox: H4a and b and H4e and f provide examples of two substitutions rather than the usual one, but the much earlier transition from Mb to c, with *A* and *B*𝄳 as the only constants, is only more dramatic in appearance, for it relies essentially on the punning equivalence of *c*‡ and *d*♭, which facilitates the shift from *B*𝄳 *c*‡ *d e* to *B*𝄳 *c d*♭ *(e)* and is, indeed, prefigured in the internal structure of ısfahan and related modes.

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[535] Omitting *f* in final descent.

[536] Omitting the cadential leading note *G*‡.

[537] Omitting *f* in final descent.

[538] Each cycle is presented as if a separate entry.

[539] Each cycle is presented as if a separate entry.

It could be argued, accordingly, that although there are no very strong similarities between 23 and 22 they do appear to align themselves in certain respects in opposition to the greater smoothness of transfer basic to the aesthetic of 296. Cantemir's taksim blueprint, on the other hand, seems to straddle the divide, for the most part choosing the route of least resistance but also allowing for episodes of greater contrast and, like 22 and 23, positioning these towards the end. For the moment, however, the possible diachronic implications that may be read into such alignments will be disregarded, and the following observations will relate to the remainder of the corpus as an undifferentiated whole.

2.4.3 *General*

Together, the taksim prototype and the three külliyat pieces provide convincing evidence that irrespective of the identity of the separate segments the preferred way of organizing extended modulatory compositions was one that respected the norms hitherto observed as regulating the internal structure of individual modes. They thus reinforce the general conclusion that notions of symmetry and minimal differentiation may be invoked as systematic features discernable at each of the three levels of organization set out above: in the repertoire of basic intervals, in the arrangement of intervallic combinations, and in the registrally differentiated concatenations of such elements forming the stable compositional resources identified and named as individual modal entities; and they suggest that a simple extrapolation of the same principles applies to the freer concatenations of modes classified as modulatory. What remains to be seen is whether this last conclusion is broadly valid for the collection as a whole.

From previous discussion it will be clear that modulations cannot always be detected with certainty (nor, when detected, always positively identified). A definitive account is therefore hardly achievable, but it is possible nevertheless to sift the quite extensive data assembled in the course of the examination of individual modes for patterns of distribution. Although not all readily separable one from the other, one may propose as an initial framework of enquiry four layers of modulatory activity:

(a) internal (i.e. constitutive of the identity of a given mode)
(b) standard or even obligatory (normally located in H2)
(c) predictable and probable (but still external and optional)
(d) unpredicatible and random.

Of these, (a) and (b) are quite restricted, and only require brief comment. The former appears primarily in ısfahan (and related modes) and involves the alternative contextualizations, noted in the discussion of the külliyat pieces, of *c*𝄲 = *d*♭. But rather than just the neat sidestep of the symmetrically counterbalanced pair:

A	*B*𝄳		*c*𝄲	*d*	*e*
			↓		
A	*B*𝄳	*c*	*d*♭		*e*

we encounter a more complex series of shifts including an intermediate stage:

A	*B*𝄳 /*B*		*c*𝄲	*d*	*e*
			↓		
A	*B*𝄳	*c*		*d*	(*e*)
			↓		
A	*B*𝄳	*c*	*d*♭		

and the final stage may even be omitted. Nevertheless, the only feature that runs counter to the norm of minimal differentiation is in the version, unique to 277, where the initial phrase contains *B*, so that we then have what appears to be the double substitution of *B*𝄳 and *c* for *B* and *c*𝄲. But as suggested in the discussion of ısfahan, *B* may here be regarded as a contextually determined local variant produced in the same way as the alterations of the pitch set that may occur in semitone flexures; and it can be related to similar phenomena in şiraz and pençgâh, so that it becomes possible to think of a small complex centred on nişabur in which there is a particular association between *B* and *c*𝄲.

A mode with an even greater number of possible internal shifts is nühüft, which calls variously upon ısfahan, buselik and rehavi, but the transitions between them are never problematical. In the other modes where there may be an alteration to the pitch set apart from the ubiquitous shift from *f*♯ to *f*, that is, notably, in saba, beyati and ırak (and their satellites), it has been suggested that the most appropriate analysis is of a semitone flexure appended to a core trichordal or tetrachordal segment, and given that this addition does not mark a shift towards any other mode it is fair to conclude that the phenomenon need not be subsumed under the rubric of modulation at all.

As far as (b) is concerned, some of the most obvious examples involve the straightforward substitution in H2 of *f*𝄲 for *f*♯. They occur in salmak, where the pitch set also includes, secondarily, *c*𝄲 (which is largely restricted to the *d c*𝄲 *d* flexure), pençgâh (with again an association with *c*𝄲), and rast, while a mode in which *c*𝄲 features more prominently is ırak, but in no case is there anything untoward when viewed against the patterns of modulation observed so far. A further phenomenon illustrated by H2 in ırak is that of overlap with another mode sharing the same pitch set (in this particular case eviç), but here an alternative and sometimes preferable analysis to modulation is commonality or inter-modal congruence.

With (c) and (d) we move from relationships that are less mandatory than normative to those that are merely facultative. Between them there is no sharp divide, the difference being essentially statistical, but in general the sequence of events in 296 and the taksim blueprint, which may be thought to represent the norm for Cantemir and his contemporaries, may be deemed representative of (c), while the more abrupt transitions to marginal modal entities found in parts of the earlier 22 are more characteristic of (d).

If we consider first the modes with the greatest number of pieces and therefore potentially the greatest number of modulations, we may take as a complementary block the three most common modes using the main-note pitch set but with a different finalis: hüseyni (*A*), rast (*G*) and ırak (*F*♯). With hüseyni the substitution of *f* for *f*♯ may be ignored when apparently integral, as may occasional insertions of *d*♭ in cadential passages, even if these carry modulatory implications. The picture that emerges with regard to the remaining alterations to the pitch set is remarkably consistent: the majority of changes involve just one shift at a time, and may be displayed as follows:

1.		*A*	*B*𝄳	*c*	*d*	*e*	*f*♯	*g*	*a*	
	→	*A*	*B*𝄳		*c*𝄲 *d*	*e*	*f*♯	*g*	*a*	

The finalis remains *A* and the modulation is into hicaz and/or uzzal.[540]

2.		*A*	*B*𝄳	*c*𝄲 *d*	*e*	*f*♯	*g*	*a*	
	→	*A*	*B*𝄳	*c*𝄲 *d*	*e*	*f*♯		*g*𝄲 *a*	

2 is frequently a second-stage shift after 1, and may also involve the substitution of *G*𝄲 for *G*. The modulation is into şehnaz.[541] Examples of multiple modulations in this area occur in H3 of 267, 268, 316 and 320.[542]

3.		*A*	*B*𝄳	*c*	*d*	*e*	*f*♯	*g*	*a*	*b*𝄳
	→	*A*	*B*𝄳	*c*	*d*	*e f*		*g*	*a*	*b*𝄳
	(→	*A*	*B*𝄳	*c*	*d*	*e f*		*g*	*a*	*b*♭)

The finalis generally remains *A*, and the modulation is primarily into acem (and secondarily into sünbüle).[543]

4.		*A*	*B*𝄳	*c*	*d*	*e f*		*g*	*a*
	→	*A*	*B*𝄳	*c d*♭		*e f*		*g*	*a*

The finalis remains *A*. The modulation is into saba.[544]

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[540] Found (in hicaz unless otherwise stated) in 24 H3, 25 H3 zirgüleli hicaz/uzzal, 73 H3, 76 H3, 80 H3, 82 H3a uzzal/şehnaz, 83 H3b, H2d, 89 H3 hicaz/şehnaz, 90 H3a, 172 H3a, H3b uzzal, 184 H3a, H3b zirgüleli hicaz, 196 H3 uzzal/hicaz, 197 H3a, 212 H3a zirgüleli hicaz, 224 H3a and 322 H3a.

[541] Found in 24 H3, 47 H3a, 73 H3, 76 H3b, c, 78 H2a, 79 H3a, 82 H3a uzzal/şehnaz, 84 H2c, 89 H3 hicaz/şehnaz, 197 H3b, c, 198 H3, 212 H3b, 222 H3, 224 H3b. Zengüle appears in 46 H3a.

[542] Hicaz/uzzal/şehnaz, hicaz/zengüle/şehnaz, hicaz/uzzal/zengüle and uzzal/şehnaz/hicaz respectively.

[543] It is not always possible to identify acem categorically, but likely candidates are 74 H3a, 171 Ma, H3a, b, 225 H2b, 226 H3, 234 H3 and 320 H2 (but with a cadence in kürdi), while sünbüle appears in 48 H3b, and possibly in 89 H2 and (together with acem) in 225 Mb and 322 H2b. The same pitch set appears in a number of other (sub)sections of which 84 H3a and 164 H3a may be identified as beyati, and 225 H3 (and perhaps 27 H2, despite the single *B* instead of *B*𝄳) as çargâh.

[544] As allusions to saba (with the characteristic *d*♭) are standard, lines are blurred, but the following may be accepted as modulations: 46 H2b, 164 H2, H3c, 172 Ma and 314 H3a. 197 H2b may be assigned to kuçek.

5. *A B𝄳 c d e f♯ g a*
→ *A B c d e f♯ g a*

The finalis generally remains *A*. The modulation is into buselik or hüseyni-buselik.[545]

6. → *A B𝄳 c d e f‡ g a*

The modulation is into mahur.[546]

Slightly more distant is the modulation to hisar, but the transition is often neatly effected through the introduction, below the straightforward modulation into the upper tetrachord of şehnaz, of *d‡* as a leading note to *e*, which may be the finalis:[547]

7. → *A B𝄳 c d‡ e f♯ g‡ a*

The predominance of this range of modulatory possibilities is also evident in two pieces which are exceptional in containing four modulations each. In one, 78, we find only changes listed above:

			A	*B𝄳*	*c*	*d*	*e*	*f♯*	*g*	*a*
H2a	2.	→	*A*	*B𝄳*		*c‡ d*	*e*	*f♯*		*g‡ a*
H2b	7.	→					*d‡ e*	*f♯*		*g‡ a*
H2c	7.	→	*A*	*B𝄳*	*c*		*d‡ e*			
H2c	4.	→	*A*	*B𝄳*	*c d♭*		*e*	*f♯*	*g*	
H3	5.	→	*A*	*B*	*c*	*d*	*e*	*f♯*	*g*	*a*

while the other, 225, at one point introduces nihavent and hence a shift of finalis, but is otherwise typologically similar:

		E	*F♯*	*G*	*A*	*B𝄳*	*c*	*d*	*e*	*f♯*	*g*	*a*	*b𝄳*
Mb	→		*F♯*	*G*	*A*	*B𝄳*	*c*	*d*	*e f*		*g*	*a b♭*	
H2a		*E*	*F♯*	*G*	*A*	*B𝄳*	*c*	*d*	*e*	*f♯*	*g*	*a*	
H2b	→					*B𝄳*	*c*	*d*	*e f*		*g*	*a*	
H2c	→			*F‡G*	*A*	*B♭*	*c*	*d*					
H3	→			*G*	*A*	*B𝄳*	*c*	*d*	*e f*		*g*	*a*	

These pieces thus bear yet further witness to the predominance of such minimally differentiated relationships.

A rather different point to be noted is that the two most crucially important notes in hüseyni, *A* and *e*, are never replaced: there is no modulation introducing *e♭*;[548] and *B♭* is extremely rare: like the modes with which they are associated, some secondary notes are

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[545] In 27 H3b, 73 H4, 74 H3 and 78 H3c. 26 H3b is relatable to buselik aşirani (and see 2.2.15, 63 (b)).

[546] In part of 83 H2a and 87 H3.

[547] This modulation appears in 25 H1b, 78 H2b, H2c and 173 H3. It may be noted that in two cases, 25 H1b and 78 H2c, hisar is followed by a further modulation, into saba, the shift *A B𝄳 c d‡ e* → *A B𝄳 c d♭ e* being analagous to the internal *A B𝄳 c‡ d e* → *A B𝄳 c d♭ e* of ısfahan.

[548] Accordingly, one would not expect to find any alteration to *d* in neva, and there is, indeed, no trace of saba.

more secondary than others. More generally, it may be observed that although there is every reason to suppose that the hüseyni corpus is fully representative with regard to modulatory processes, it does not follow that it is exemplary with regard to the incidence and profile of modulations. A certain unevenness is indicated, for example, by the fact that seven pieces in hüseyni (10, 11, 28, 88, 188, 221 and 327) do not appear to modulate at all (or, perhaps more accurately, can be analysed in their entirety in terms of the one mode). Few modulations occur in the pieces in eviç, and virtually none in the ten pieces in mahur; and where modulations do occur in reasonable numbers there may be quite different preferences: pieces in uşşak tend to opt for beyati; and pieces in beyati and neva tend to avoid hicaz, so common in hüseyni.[549]

If we turn now to the rast corpus, it may be recalled that attention has been drawn to its restricted palette of modulations, and certainly to modes with a different pitch set, evidently influenced by the fact that relatively few share with it finalis *G*. As a result, there are just two which occur with a high degree of predictability (and even, as in 108 and 300, co-occur): mahur and nigriz, and it is indicative that the latter is sometimes used as a gateway to related modes with finalis *A*, hicaz especially.[550] In each case only one change to the pitch set is required, and the question then arises of why there are not more examples of nihavent, the other mode with finalis *G* which requires only one change, and which is actually cited as a member of the modulatory family of rast.[551] One might surmise that just as alterations to the most prominent notes, *G* and *d*, are avoided,[552] so also the secondary prominence of *B𝄳* acted as a barrier to this particular modulation, but that this cannot be the case is demonstrated by sundry instances of *B*, which may (as in 106) be the product of a modulation to mahur, but generally points in the direction of buselik, which with finalis *A* should be a less immediately attractive target than nihavent (and, indeed, will generally be steered back towards a cadence in rast so that its finalis is avoided).[553]

The picture presented by the modulatory preferences encountered in ırak is, as expected, analogous. Common are shifts to the hicaz group and to saba, again involving one pitch change each, but both the latter and segâh, which is also frequent, are often followed by a return to ırak pointing towards the compound modes muhalef ırak and ru-yi ırak respectively. Also particular to ırak is the standard allusion to hüzzam at the beginning of H2, but this is, again, not something that runs counter to the norms observed so far.

Of particular interest because of its complexity is 30. This contains a number of changes of emphasis (and hence identity) within the same pitch set, shifting from ırak proper in H1 in the direction of saba, fleetingly, and rast, more definitely, in M (at the same time varying the finalis, from *F♯* to *A* to *d* to *A*), and then in H3a to hüseyni (with finalis *e*). In addition, it gives an extensive illustration in H2b of the common technique of modally transforming melodic material (in this case the beginning of Mb), keeping the same rhythmic organization but altering the pitch set, so that we have:

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[549] Within the large-scale neva corpus preference goes to acem, also common in hüseyni, and nihavent, which is not. A further major difference is that whereas *e♭* is avoided in hüseyni it is not at all problematic in neva, and beyati duly appears with some frequency.

[550] 2 H3 and 106 H3a, b provide examples of nigriz followed by hicaz. But the move to hicaz may also occur without the intermediate step of nigriz, as in 107 H2d, e (with uzzal first) and 238 H3. Finalis d may also occur with modulations to nigriz, as in 127 H3 and 214 H3.

[551] Its presence may be detected in 104 H2b (in the upper octave) and 170 H3b (but with finalis *A*), and in neither is there a large-scale exposition.

[552] There is just one example of saba, in 170 H3a (with finalis *c*).

[553] *B* appears in 104 H2c, 121 H2b, 122 H3, 238 H2b and 308 H4.

Mb	*G*	*B𝄳*	*c*	*d*	*c*	*e*	***d***	*e*	*d*	*c*	*B𝄳*	*c*	*d*	*e*	*c*	*B𝄳*	*A*
H2b	*G*	*B𝄳*	*c𝄲*	*d*	*c𝄲*	*e*	***d***	*e*	*d*	*c𝄲*			*d*				
							d	*e*	*d*	*c𝄲*	*B*	*c𝄲*	***d***	*e*	*c𝄲*	*B*	*A*
	G	*B*	*c𝄲*	*d*	*c𝄲*	*e*	***d***	*e*	*d*	*c𝄲*			*d*				
							d	*e*	*d*	*c𝄲*	*B*	*c𝄲*					
													d	*e*	*c*	*B𝄳*	*A*

Again, the successive changes proceed smoothly, with one substitution at a time, so that so far there has been no evidence for the more abrupt contrasts of (d). If these are to be found anywhere, it might be suspected that they would be associated with marginal entities such as /1 2↾ 2 4/, but in fact this is generally preceded or followed by /1 2↾ 3♭ 4/ or /1 2↾ 3 4/, so that there is nothing untoward about the transitions involved. Moves involving two substitutions certainly occur, as in e.g. 322 H2, where *d e f♯ g a b𝄳 c' d'* is followed immediately, before the cadential repeat, by *d e f g a b♭*, but here, as elsewhere, one of them can usually be viewed as a secondary product appearing only in the context of a flexure (in this case *a b♭ a*), and it is clear that for the notated corpus as a whole (d) is a somewhat notional category: the more adventurous modal conjunctions are reserved precisely for the külliyat pieces that specialize in modulation.

Rhythm

3.1 *Introduction*

The preceding survey of modes was an attempt to discern general principles of organization behind the particular manifestation of a mode or modes in individual pieces or (sub)sections. Beginning at the level of specificity articulated within the tradition by the nomenclature used, it subsequently moved to increasingly abstract levels of melodic contour and typology involving, eventually, the relations and contrasts between sets of constituent elements that in some sense can be thought of as an underlying system. But we only have access to the ways in which the melodic potential of that system was characteristically realized in Ottoman music of the late seventeenth century through compositions in fixed rhythmic cycles. In the absence of any tradition of unaccompanied percussion performance, study of these involves, essentially, two levels, one dealing with the purely metrical dimension, the structure of each cycle as defined by its internal disposition of contrasting qualities, while the other, more important level involves consideration of the characteristic rhythmic inflections that each cycle imposes upon the melody, for despite the different ways in which they are symbolized in the notation rhythmic cycle and melody are not discrete entities more or less felicitously juxtaposed: as well as constituting a recurring set of timbrally contrasted percussions separated from each other by specific durational relationships, each cycle exercises a particular control over the way the melody is manifested by channelling it towards a preferred set of rhythmic patterns, so that its presence, even in the absence of an explicit articulation by means of percussion instruments, is both pervasive and, especially in the shorter cycles, palpable.[1] It is, further, through examination of the more common strategies that produce melodic progress over a given cycle that we can most appropriately expand on the list of formulaic moves given in the previous section in relation to final cadence areas, characterizing some of the other conventions which formed an important element of compositional technique at the (sub)section level, and thence arrive at an understanding, however hesitant and tentative, of further crucial aspects of musical creativity within this tradition.

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[1] As a structural mould controlling the shape of the melodic material it also fulfils an important role in facilitating the learning process, a point emphasized by C. Behar (*Zaman, mekân, müzik. Klâsik türk musıkisinde eğitim (meşk), icra ve aktarım* (AFA - Türkiye üzerine araştırmalar, 14), Istanbul: AFA Yayınları, 1993) in an important study of the processes of transmission.

3.2 *Metrical structures*

The analysis of the rhythmic cycles can thus encompass both an autonomous enquiry and one that complements the analysis of the melodic modes. In contrast to the trajectory adopted in relation to the latter it may be appropriate here to proceed in retrograde motion: from initial consideration of the complementarities and contrasts in the patterns of abstract schemata of durations and the percussions that articulate them to examination of the core phenomenon of melodic mapping which brings pitch contour and temporal articulation together.

It is trite but at the same time important to observe that the various cycles are to be distinguished not only individually, one from the other, but also collectively, from free rhythm, that important strand associated specifically with the improvised taksim. The very existence of free rhythm provides yet another level of contrast, but equally interesting is to note the additional element of tension that would arise, say, in the *fasıl*, from the shift from one to the other, for there is always more than one element involved:

absence of rhythmic cycle	presence of rhythmic cycle
improvised	precomposed
(and therefore by definition unknown in advance)	(and therefore, unless a new piece, potentially known in advance)

Unfortunately, the metrical characteristics of seventeenth-century taksim performances cannot be explored.[2] Although the form was evidently of considerable importance, as witness the lengthy discussion Cantemir devotes to it, including a blueprint for a complex modulation sequence, the indications he gives concern, exclusively, pitch organization. That there were broad conventions controlling such matters as length of phrases and pauses and the incidence and tempo range of phrases characterized by a fairly regular pulse is hardly to be doubted, but whether because of the greater importance attached by Cantemir to the modal and more specifically modulatory potential of the form or, more mundanely but perhaps more likely, because of the sheer technical difficulty of notating fluctuating durations that would, in any case, have little or no normative value, he left no record by which we might gain some insight into the metrical dimension of improvisations in free rhythm.[3]

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[2] For a discussion of free rhythm and related analytical problems see M.R.L. Clayton, 'Free rhythm: ethnomusicology and the study of music without metre', *Bulletin of the School of Oriental and African Studies*, 59/2, 1996, pp. 323-32.

[3] For a general evaluation see Feldman, op. cit., pp. 274-88. Rightly emphasized here is the important point that taksim was a vocal as well as instrumental form, so that in its general pacing, particularly with regard to phrase length and pauses, it is likely to have exhibited similar norms to those obtaining in contemporary (but equally undocumented) Qur'ānic cantillation.

The following discussion is, therefore, concerned solely with the rhythmic cycles and the corpus of instrumental compositions in them. As with the modes, the question arises of the extent to which the rhythmic cycles can be said to form a system in the specific sense that they are characterized by a number of coherent and regular correspondences. These might be located externally, in patterns of incidence within the repertoire, and/or internally, in patterns of time unit totals, for example, or of percussion sequences occurring in more than one cycle, the former thus being functional, the latter structural.

3.2.1 *Assumptions*

At this point certain clarifications are required. Missing from the *edvār* is the leaf containing Cantemir's definitions of seven cycles (çenber, hafif, havi, muhammes, nim sakil, remel and sakil), while that given for an eighth, semai-i lenk, is potentially misleading,[4] and if the attempt is to be made to draw conclusions from these cycles, or at least offer pertinent observations about them, the question inevitably arises of the legitimacy of the versions proposed.

In the first case this is easy to establish, despite the apparently contradictory nature of the evidence. Çenber forms part of zencir, and from the notations of the compositions in zencir it is clear that what remains after subtracting the other constituent cycles is 12 time units; and since the percussion patterns Cantemir gives for these in his definition of the zencir cycle coincide exactly with his definitions of the free standing forms of them[5] there is every reason to accept the pattern he provides for the çenber segment of his zencir definition. The contradiction referred to arises from the fact that although the evidence of the notated corpus is wholly consistent, the number of time units allotted to çenber within the zencir diagram is not 12 but 24, so that by comparison with the notated repertoire it appears in the definition to be moving at half speed. But whatever this may imply for the tempo of çenber, the pattern of percussions is not in doubt.[6]

In the other cases, however, there is no such alternative internal source of information, and to establish both the total number of time units and the internal pattern of percussions recourse must be had to other sources. In the absence of relevant earlier or contemporary definitions[7] these have to be later, and for the most part considerably later, the earliest being

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[4] A point not made explicit in Part i (p. xx), where semai-i lenk is simply (and misleadingly) added to the list of cycles for which there is no definition. See Feldman, op. cit., p. 478, for comment on Cantemir's terminology, which also includes other variants, and the discussion in 3.7.

[5] There is one missing slot in the devr-i kebir segment, but this is an obvious (and insignificant) slip.

[6] For further discussion see 3.7. Feldman, op. cit., pp. 316-7, resolves the contradiction by assuming the existence of two versions of zencir, an earlier one with the 12 time-unit form of çenber (so that the total number of time units should read 60, not 48, as given), and a later (and specifically late seventeenth-century) one with the 24 time-unit form (so that the total number of time units should read 72, not 60). But Cantemir's collection contains no example of the latter.

[7] Earlier definitions are to be found in late fifteenth-century texts, but these are too remote in time and place (and also manner of representation) to be relied upon in the present context; and Nāyī 'Oṣmān Dede fails to deal with rhythmic cycles. Which leaves 'Alī Ufḳī, and though there are no definitions in the *mecmua*, a list is supplied in the earlier *müsvedde* (Bibliothèque Nationale, MS Turc 292, fol. 149—I am grateful to Cem Behar for reminding me of this). Unfortunately this is in another hand, and the likelihood is that it is somewhat later.

Fonton's mid eighteenth-century account. Fortunately, this does not occasion major difficulties: it is clear on the one hand that certain cycles have remained remarkably stable over time in their internal structure,[8] and on the other that a number of later definitions occur in treatises that are elsewhere heavily reliant on Cantemir's *edvār*, so that the chances are quite high of being able to reproduce his original versions, or at least something closely approximating to them. Those used in Part i have been derived largely from one such treatise[9] which provides the added assurance of containing versions for other cycles that either differ only trivially from those in the *edvār*[10] or, indeed, coincide with them,[11] and a textual affiliation is demonstrated beyond dispute by the fact that this work even reproduces exactly Cantemir's if not erroneous then obsolete version of semai-i lenk. It is true that it also adds blunders of its own, so that there are instances of the sum of the values of the percussion pattern failing to correspond to the number of time units specified;[12] but no such problem arises in the cases of hafif, muhammes, nim sakil, remel and sakil, and it has, accordingly, been taken as the source for the versions of the percussion underlay of these cycles used in Part i.[13] These in any case vary little from the versions given by the standard modern authorities,[14] to which we may therefore reasonably turn to supply what is apparently missing from semai-i lenk. Cantemir defines it as *düm - düm tek - düm tek -*, but from the notations it is clear that we are dealing with a cycle of ten time units rather than eight, and the earliest major twentieth-century authority, Rauf Yekta Bey, offers a definition with the extra two time units required (identified by brackets): *düm - düm tek - düm [-] tek - [tek]*, which on the face of it provides a straightforward solution to the problem.[15] But there are two compelling reasons for rejecting this version: it requires Cantemir to have made two separate errors rather than just one, which seems unlikely in the extreme; and the melodic evidence of the pieces in this cycle points to his *düm tek -* ending being more convincing than *tek - tek*. On balance, therefore, it seems preferable to assume haplography and propose *düm - düm tek - [tek -] düm tek -*.[16] In the case of havi, finally, the version proposed takes that in T 1856 as its base, but introduces some minor modifications: - for *ke* in time unit 8; *teketeke* for *te ke* in time units 47-8 and 63-4; and *t* - for *te ke* in time units 51-2. In each case the substitution corresponds to the sequence of percussions in Fonton;[17] all except 47-8 are given by Haşim Bey;[18] and further justification is provided by analogy with, variously, darb-ı fetih and sakil. It may thus be suggested that although there is no guarantee that these substitute definitions match in every detail those missing from the *edvār*, what differences there may be are almost certainly trivial, and thus insufficient to call into question any analytical conclusions that might be drawn in the following discussion.[19]

3.3 *The repertoire of cycles*

The first point Cantemir makes about the cycles is that they are pervasive, for despite the explicit mention (p. 67), in relation to the taksim, of free rhythm—or, more precisely, the absence of a cyclical underlay, *uṣūl*—he begins (p. 78) his analysis of cyclical rhythm (*'ilm-i uṣūl*) in traditional fashion by asserting that it is an indispensable element, a melody (*naġme*) without *uṣūl* falling outside the bounds of music proper, and this dictum is buttressed by an analogy with metre, deemed equally vital to poetry. Four constituent elements (*'anāṣır*) are distinguished within the cycles: the various types of percussion, each of which is allotted its own symbol: *düm*, *tek*, *teke* and *teketeke*, the first pair thus relating to the two major

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[8] As emerges clearly from e.g. the careful collation of the various definitions in the literature of darb-ı fetih presented in Y. Tura, *Türk mûsıkîsinin mes'eleleri*, Istanbul: Pan Yayıncılık, 1988, pp. 87-103.

[9] İstanbul Üniversitesi Kütüphanesi MS T 1856. The definitions of the simplex cycles are given on fols. 6v-14v. This anonymous and probably nineteenth-century treatise, to judge by the number and identity of the other cycles it includes, is catalogued simply as *edvār-i 'ilm-i mūsīḳī*. There is no colophon. It reproduces much of Cantemir's original, especially the material on makams, but prefaces this with a substantial amount of further matter, much of it cosmological, and, no doubt also in imitation of Cantemir, an extensive catalogue of instrumental compositions. There is no mention of it in Akdoğu, op. cit.

[10] The cycles in question are devr-i kebir (with *düm* - for Cantemir's *tek düm* in time units 8-9: but it is the latter which occurs within the devr-i kebir segment of zencir), hezec (with *düm tahek* (*tahek* being a stroke combination not recognized by Cantemir) for Cantemir's *tek düm* in time units 18-19) and darb-ı fetih (with, oddly, *tek teketeke* - for Cantemir's *te ke te ke* in time units 85-88).

[11] Berefşan, evsat, frenkçin, semai and sofyan.

[12] For example, the definition of fahte as a cycle of 10 time units is followed by the pattern *düm düm düm tek - - düm tek - teketeke*, which give a total of 11. Comparison with Cantemir's *düm - tek - - düm tek - teketeke* makes clear what has happened.

[13] Accepting for muhammes the adjustment written above for the last seven time units, and for hafif the version with a total of 32 time units. For Feldman (op. cit., p. 446), however, hafif has 16 time units. For further discussion see 3.7.

[14] Thus for hafif Rauf Yekta Bey's version ('La musique turque' in *Encyclopédie de la musique et dictionnaire du conservatoire* (Lavignac), i (Histoire de la musique), Paris: Librairie Delagrave, 1922, pp. 2945-3064, at p. 3056) has for time units 11-20 *düm tek düm tek tek - düm - düm tek* instead of the *te ke düm tek tek - düm - te ke* adopted here (and also, incidentally, in İ.H. Özkan, *Türk mûsikîsi ve usûlleri*, Istanbul: Ötüken Neşriyat, 1984, p. 672); his version of remel (p. 3054) has one of two additional percussions but is only substantially different in the last four time units, while that of Özkan (p. 667) is much closer, differing only in two time units; for muhammes the only significant divergence is in time units 2-4, where the modern form has *teke düm tek* in pace of *tek teke düm*, while in sakil and nim sakil the differences are only trivial.

[15] op. cit., p. 3042, with similar forms in later authorities (e.g. İ.H. Özkan, op. cit., p. 618).

[16] Fonton, who specifies the sequence of percussions, but not the durations separating them, is no help here, giving *düm tek tek / düm tek* (see E. Neubauer (ed.), 'Der *Essai sur la Musique Orientale* von Charles Fonton mit Zeichnungen von Adanson', *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften*, 2, 1985, 277-324, at p. 298). Feldman (op. cit., p. 478) suggests that Cantemir wrote 1 instead of 3 at the end of the cycle, which is a little puzzling as the final value he gives is 2.

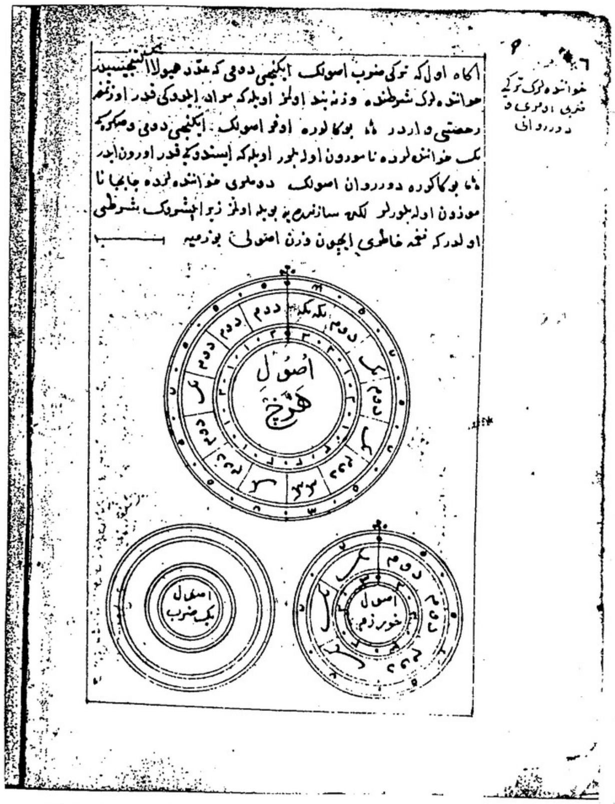
[17] ibid., pp. 307-8.

[18] Reproduced in G. Oransay, *Die traditionelle türkische Kunstmusik*, Ankara: Küğ-Veröffentlichung, 1964, p. 31 (from Haşim Bey, *mecmua-yı kârha ve nakşha ve şarkiyat*, Istanbul, 1280 AH).

[19] Certain variations might in any case have been permissible. Cantemir prefaces (p. 79) his definitions with a forthright and very emphatic comment to the effect that it is very difficult to grasp the nature of the cycles just from their written form, so that instruction should be taken from a master:

ايمدي ذكر اولنان اصول بر وجه وزن رقم هر بريسينك صفتنه كوره عملنى ايده يم ديرسك كركدر كه كامل استاد واصولبند كمسنه دن
تعليم آله سن زيرا اصولك وزننى يالكز يازيدن بولق بكا غايت ايله مشكل ايش كورينور.

This needs to be set against a cultural norm of purely oral transmission, and so probably implies nothing more than the problems associated with unfamiliarity with a symbolic representation divorced from physical movement; but it could conceivably be thought to hint at the existence of subtle variations additional to the basic forms listed.


اصول هزج
اصول خورزم
اصول یک ضرب

The final page of rhythmic cycles, with those for hezec, horezm and yek darb

qualitatively differentiated attacks, the second to compound strokes, one duple (*teke*), the other quadruple (*teketeke*)—although in the absence of any indication that *teketeke* was qualitatively distinct from a repetition of *teke* it could be argued that Cantemir did not, strictly speaking, need to conceive of them as separate entities.

The cycles are stated (p. 79) to be 24 in number, and a list is appended, consisting of 22 simplex and two compound cycles (formed by a concatenation of simplex cycles). Matters are not, however, quite straightforward, for the list contains three names that do not appear in the notations: türki darb, nim devir and evfer, and for two of these definitions are also given (pp. 83, 84).[20] Later (p. 85), alongside the definitions of the compound cycles darbeyn and zencir, two remarks are added, one of which provides a simple explanation for the absence of türki darb and evfer: they were restricted to the vocal repertoire.[21] But the other remark complicates matters further by informing us of the existence of yet another three cycles, hezec, horezm and yek darb, again ones not exemplified in the collection. In this case, however, Cantemir adds the qualification that they were in use among *ehl-i mūsīḳār,* a phrase which can be construed as connoting a high degree of technical skill and expertise, the implication presumably being, therefore, that knowledge of them was restricted to a very few specialists (in which case, by the same token, they can only have occurred in a few compositions, whether vocal, instrumental or both, too esoteric to become mainstream repertoire items).[22] Definitions are provided (see fig. 1) on the following page, in the standard circular format, for hezec and horezm, but the third circle has unfortunately been left empty except for the name yek darb inscribed in the centre, so that the only evidence is the size of the circle, which is the same as the smaller of the other two, that for horezm. If we exclude the unlikely hypothesis that the circle was left blank because it was found to be too small to house the definition we may conclude that yek darb is likely to have been one of the shorter cycles,[23] with probably 12 or fewer time units marked by eight or fewer strokes or combinations of strokes.

These three circles, which conclude the chapter, are preceded by further observations on türki darb and evfer and a related comment on devr-i revan. They point to a difference of approach between singers and instrumentalists, for according to Cantemir segments of these

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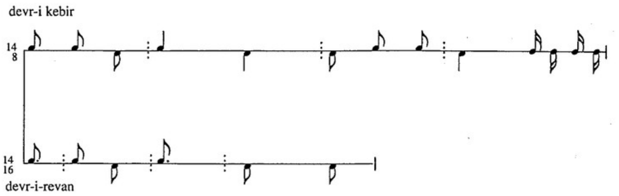
[20] It is reasonable to assume that among the missing definitions was also one for the third cycle, türki darb, but in the light of the fact that it is not included in the list of time units for each cycle in the various notational codes (p. 133) this is by no means certain. In any event, this omission means that it is not possible to determine which of the variable later definitions most closely corresponds to the late seventeenth-century form.

[21] There is no mention of nim devir, but that the same is true of this cycle is clear from the evidence of the Hafız Post song-text collection, in which all three figure prominently, with evfer being one of the most common cycles of all.

[22] cf. p. 62, where Cantemir speaks of those who are *kâmil ehl-i mūsīḳār* being able to negotiate difficult modal transitions.

[23] This might seem fairly obvious, given that its name means 'one stroke/percussion'. However, it may be recalled that earlier definitions of a cycle with a name meaning 'four strokes/percussions' refer to a structure containing 96 time units.



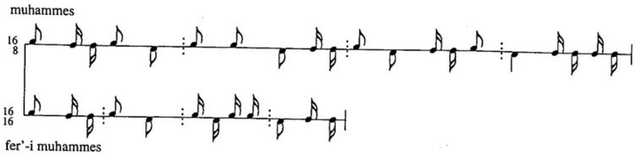
Example 1

If we consider the *teketeke* of time units 13-14 in the former to be an elaboration of the equivalent *tek* in the latter, the two cycles correspond exactly in the second and fourth of their four internal segments, so that the only difference of substance is provided by the variation in devr-i kebir in the internal distribution of percussions in the third segment as compared with the first, such that the *düm* of devr-i revan now has corresponding to it a contrasting *tek*. But a different and more exact relationship, even if one less immediately apparent because of the durational asymmetry caused by the aksak structure, is that indicated by the vertical alignment: the pattern of qualitatively differentiated percussions in devr-i revan, *düm* + *düm* + *tek* + *düm* + *tek* + *tek*, is identical with that of the first seven percussions in devr-i kebir (which although not evidence for, is certainly compatible with, the notion of an approximate 2 : 1 tempo relationship encoded in the quaver vs. semiquaver representation of a time unit). These two cycles are thus strikingly similar and, it would appear, relatively faster and slower counterparts one to the other. Further, the differences that remain in their patterns of percussions should be regarded as having a positive function to the extent that they still permit a degree of tempo overlap: quite apart from any possible variation in melodic conventions, the existence of which has still to be investigated, a faster than usual devr-i kebir performance would, in the presence of percussion instruments, still be distinguishable from a slower than usual devr-i revan one.

Between devr-i revan and the third, and very rare, cycle in this group, horezm, there is, in contrast, a considerable degree of overlap, so much so that it would be reasonable to regard horezm as no more than an insignificant variation of devr-i revan, derived in the first instance by reversing the order of its halves:

devr-i revan / *düm* - - *düm* - *tek* - *düm* - - *tek* - *tek* - /
horezm / *tek* - - *tek* - *tek* -
düm - - *düm* - *düm* - /

Among the other set of three, those with 16 time units, there is again an evidently linked pair, muhammes and fer'-i muhammes:



Example 2

The pattern for the first four time units of muhammes is thus identical with that for the first eight time units of fer'-i muhammes. But the similarities do not end there, for the same two levels are involved, and more obviously so because of the internal symmetry. First, if the two cycles are thought of as being divisible into four segments (4 + 4 + 4 + 4), it will be seen that in the first time unit of each segment the same sequence of percussions is exhibited by both (*düm* + *düm* + *düm* + *tek*) with, in addition, the third time unit of segments two and four also being the same; and second, as shown by the vertical alignment, the percussions marking the onset of every other time unit (beginning with the first) in fer'-i muhammes map onto the percussions marking the onset of the first eight time units in muhammes. It is, accordingly, fairly clear that fer'-i muhammes is, as its name indicates, a variant, and specifically a variant of the first half of muhammes differentiated solely by the addition of two percussions in its third segment.[28] This derivational relationship could be cited in support of the supposition that the two again belong to different tempo bands, but despite all the similarities, there is a contrast of pattern which would allow tempo overlap without smudging identity, and the case for assigning fer'-i muhammes to the fast group is otherwise weak.[29] Unlike horezm, the third member of this set, berefşan, is as common as muhammes (while fer'-i muhammes is quite rare), and it further differs from it in being evidently unrelated to either of the other 16 time-unit cycles: the fact that the pattern of percussions in its final five time units is identical with that in muhammes means no more than that both include a common formulaic ending.

This set thus lacks the coherence that can be postulated for the earlier one, and that such coherence is the exception rather than the norm is demonstrated by the fact that the two cycles with 12 time units each, çenber and frenkçin, those with 10, fahte and semai-i lenk, and those with 9, nim devir and evfer, are equally unrelated to each other. However defined, their

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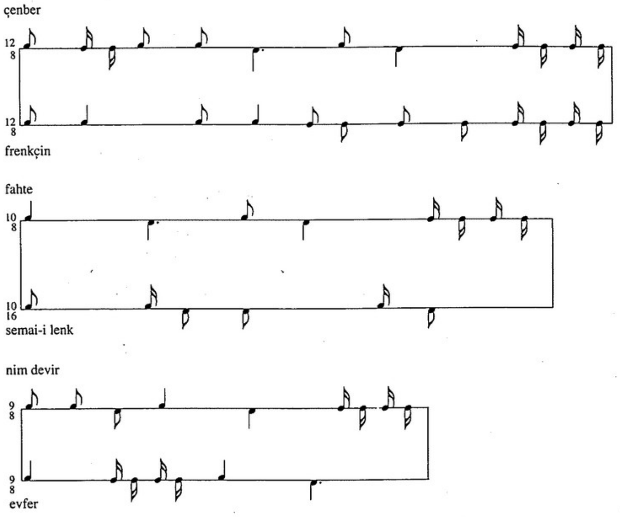
[28] This provokes the thought that devr-i revan might likewise be a variant of the first half of devr-i kebir (which is then redivided, with durations realigned to form symmetrical halves), in which case the final *tek* of devr-i revan would need to be interpreted not as equating with that marking time unit 8 in devr-i kebir but, quite plausibly, as an additional percussion marking the previously empty time unit 7. This is, no doubt, fairly speculative, but an argument in favour of the marginal survival of an independent 7 time-unit cycle is advanced in Part i in the course of the discussion of 348.

[29] The question will be discussed further in 3.7.

internal segments do not match and the sequences of percussions have nothing in common, so that beyond the shared totals of time units comparison reveals no similar structural parallels:



Example 3

Of interest is the fact that among the instrumental pieces there is a total absence of cycles with an odd number total of time units. However, as the last pair in ex. 3 provides two common examples in the vocal repertoire no general conclusion can be drawn. Accordingly, if the assumption that there may be something systematic about the cycles as a whole is not to be relinquished we might hazard a guess that in the absence of any discernible pattern at the level of the total of time units it might be worthwhile looking for regularities in the ordering of the elements (however defined) that make up the cycles and in the particular sequences of percussions by which they are articulated, and it is to these that we may now turn.

3.4 *Typology and formulae*

In investigating the possibility that the internal structure of the cycles might be characterized by systematic features, we may simplify matters by selecting for initial consideration only the core cycles in the instrumental repertoire, that is—even if the cut-off point is arbitrary—those with an incidence in Cantemir's collection of 17 or more (i.e. not less than 5% of the total). The cycles in question are: düyek (82), devr-i kebir (40), sakil (36), semai (33), darb-ı fetih (26), fahte (24), muhammes (18), berefşan (17) and çenber (17).

3.4.1 *The core cycles*

For the time units marked by a percussion there are five possible articulations: *düm, tek, te, ke,* and *teke,* and to these must be added the zero articulation of the time units not so marked. They will be abbreviated to d, t, te, ke, tk and 0 respectively. As already noted, there appears to be no qualitative distinction between te ke and tk, and as te entails ke and tk entails tk, it would be logical to subsume tk under te and ke. However, there is a difference in their distribution in the core cycles which justifies retaining them as separate entities: te ke may occupy one time unit (one syllable for each half unit, in which case it cannot be repeated) or two time units (one syllable for each unit, in which case it may be repeated once, occupying therefore four time units in all); whereas tk is always repeated to form tk tk, which occupies two time units (one syllable for each half unit) and cannot be repeated to occupy four.

Assuming that there are no other sequencing restrictions, for two consecutive time units there will, accordingly, be 14 possible combinations of the above six discrete entities, for three 50, and so on. The question arises, therefore, of what constraints, if any, control choice, making certain combinations unacceptable, and which particular concatenations are preferred, appearing therefore in more than one cycle. One already noted may be formally stated as:

1 te always precedes ke; and ke always follows te

while a related but much more specific constraint is:

2 tk tk can only appear in the last two time units of the cycle and must be preceded by /d t 0/

While there is no obvious reason why /d t 0 tk tk/ rather than one of several other strings should be obligatory, it may be noted that it conforms to an overarching principle: the very term 'cycle' presupposes two fundamental qualities (without which we would be dealing with pulse): contrast and asymmetry, and all the constraints articulate particular contrastive features. Thus the ending of the cycle is always differentiated from the beginning (which will immediately follow it), more specifically:

3 the first time unit must be occupied by d
4 the last time unit must be occupied by 0, ke or tk

All the remaining constraints apply to strings occurring within the cycle, not across the boundary between cycles. More general contrastive constraints operate by limiting the domain of repetition:

5 the same entity cannot appear in more than two contiguous time units
6 two different entities in two contiguous time units cannot be repeated more than twice
7 a string of two or more different entities occupying from three to six time units cannot be repeated more than once

(to which may be added the more specific

8 when occupying two half time units te ke cannot be repeated; and when occupying two time units cannot be repeated more than once
9 within six (or fewer) contiguous time units, d may not occur more than three times)

or, the other side of the same coin, specifying the extent of variation:

10 in addition to d, 0 and at least one other entity must be included

These are sufficient to reduce the number of possible strings very considerably. Thus for a hypothetical cycle of three time units we now have, instead of 50, just four possibilities, which are, symbolizing te ke occupying a half unit each as te-:

d t 0
d te- 0

d 0 t
d 0 te-

But two of these fail to appear in any of the nine cycles, so that further constraints of more local application would appear to be in operation. Thus we have:

in relation to te-:

11 te- cannot be preceded by 0, and must be followed by d (+ d or t)

and in relation to te ke occupying two (or, if repeated, four) time units:

12 te ke (or te ke te ke) must be preceded by 0 or t; and must be followed by d

and in relation to d and t:

13 /d 0/ cannot be followed by 0
14 initial /d 0/ cannot be followed by d
15 (non-initial) /d 0 d/ must be followed by 0 or t
16 /d d/ must be followed by t
17 /d d t/ cannot be followed by t
18 /t 0 t/ must be followed by (0 +) d
19 /t t 0/ must be followed by d

For a hypothetical cycle of four time units we now have just six possibilities:

d 0 t 0
d t 0 0
d d t 0

d t t 0
d t d 0
d 0 te ke

The last of these is sofyan, the one existing four time-unit cycle, and all the other strings are attested within more extended cycles.

However, despite the fact that some of the constraints operate over a wider domain, in longer stretches they still permit more strings than actually occur. Thus if one were to evaluate their application to the much more complex context of a hypothetical cycle of six time units, and in time unit 2 (where d, t, te- and 0 are all possible) consider just the two entities d and 0, we would have for d:

d d t 0 tk tk
d d t 0 te ke
d d te- d t 0

and examination of the nine cycles shows that although the first occurs in devr-i kebir and the second in darb-ı fetih, the third does not appear, despite being partially matched by the beginning of muhammes:

d te- d t d

while for 0 we have seven possibilities:

d 0 te ke te ke
d 0 te ke d 0
d 0 t 0 d 0
d 0 t 0 t 0
d 0 t t te ke
d 0 t 0 te ke
d 0 t d t 0

of which the first five are attested in the nine cycles, and the last two not. However, the sixth is quite similar to the fifth, and the seventh may be compared with:

d t t d t 0

which is semai.

The constraints listed thus appear to provide a reasonably close fit, but no more than that: they do not, and are not intended to, constitute a quasi-grammar producing all and only the strings (the minimum and maximum lengths of which have still to be defined) from which the existing cycles are formed. To do so would require not only further reformulation but also the incorporation of more constraints of increasingly local relevance. For example, the sequence /t d t/ occurs only in semai, and it would be simple to produce (as one possible formulation):

/t d t/ must be preceded by t

in order to discard the seventh string above.

But rather than attempt to arrive at a perfect fit by adding yet more and equally arbitrary constraints to cater for every individual circumstance (and some of those already given are hardly of wide applicability), we may at this stage prefer simply to stress the general validity of the broad principles of contrast expressed in the first instance in constraints 5-9, which limit the number of times particular entities can be repeated within a given space, and secondarily in 3, 4 and 10, which specify the inclusion and positioning of various different entities.

3.4.2 *Other cycles*

The remaining cycles attested in the instrumental repertoire include the two compound cycles, darbeyn and zencir, which are derived exclusively from cycles already considered (düyek, fahte, çenber, devr-i kebir and berefşan) and do not therefore need to be discussed further in this context. The others (several marginal, as shown by their incidence, given in brackets after each) are devr-i revan (10), evsat (3), fer'-i muhammes (3), frenkçin (1), hafif (13), havi (3), nim sakil (1), remel (2), semai-i lenk (6) and sofyan (2). Of these, sofyan has already been seen to be one of the structures allowed for by the constraints and presents, therefore, no problems; likewise, hafif, fer'-i muhammes and remel contain nothing they rule out. But any hope that we might already have arrived at a set of statements valid for all cycles is swiftly dispelled by the unsettling case of frenkçin, which has the following structure:

d d 0 d d 0 te ke te ke tk tk

Although this conforms to the core constraints 5, 6, 7 and 10 (and also 3 and 4) it nevertheless flouts no fewer than five others.[30] But essentially it differs from the previous norms in two main respects: one concerns the common thread between 2 and 12: tk tk occurs in the required place, but is preceded by ke rather than 0 and, conversely, te ke te ke, which follows 0 as prescribed, is followed by tk tk rather than d;[31] the other may be viewed as the end product of the first: an unparalleled sequence of six time units all with the same quality; and these are matched for uniformity by the previous six time units in which, apart from 0, only d appears. 9 could easily be amended to take account of this by increasing 'd may not occur more than three times' to 'd may not occur more than four times'. Likewise, 16 could be amended to '/d d/ must be followed by t or 0', but the price of such changes is to allow more non-occurring strings through the net. It is at any rate clear that frenkçin is something of a sport: the lack of contrast in each of its two halves sets it apart from all the core cycles, and it is quite conceivable that its distinct lack of popularity could have been partly due to this

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[30] Which are:
2 tk tk... must be preceded by the string /d t 0/
9 within six (or fewer) contiguous time units, d may not occur more than three times
12 te ke (or te ke te ke)... must be followed by d
15 (non-initial) /d 0 d/ must be followed by 0 or t
16 /d d/ must be followed by t

[31] Given the lack of conformity with previous norms it might be argued that time units 11-12 of frenkçin could just as well be described with an alternative formulation: te- te-. But this would merely invoke different infringements, and in any case Cantemir's definition is explicit.

factor.[32]

Similar arguments may be advanced with regard to evsat which, if anything, flouts the constraints more spectacularly, the most blatant—and important—infringement being that although it embodies the fundamental principle of contrast by having d at one end of the cycle and te ke at the other, it reverses the normal order of events:

te ke te ke 0 d 0 t 0 d 0 d 0 te ke te ke 0 d 0 0 0 d 0 0 0

Unfortunately, it is impossible to follow such arguments to their logical conclusion, which is that even if the constraints cannot be thought of as marking the limits of what is possible they do in some way summarize characteristics present in the core cycles and absent from the marginal ones, for the cases of sofyan, fer'-i muhammes and remel show that conformity does not entail popularity, while that at least a reasonable level of popularity does not depend on conformity is shown by devr-i revan and semai-i lenk. It is true that in the case of devr-i revan, where the inappropriate constraint is 13 ('/d 0/ cannot be followed by 0'), it might be urged that the (two-fold) incidence of /d 0 0/ is, quite simply, a function of the fast tempo band to which this cycle belongs, so that the overall duration may be assumed to have been comparable to that of /d 0/ in the slow group, but this line of defence fails on the ground that by the same token the initial /d 0 0 d/ sequence should be deemed equivalent to an initial /d 0 d/ elsewhere, which would run foul of constraint 14 ('initial /d 0/ cannot be followed by d'). Further, 14 is also directly infringed by semai-i lenk:

d 0 d t 0 t 0 d t 0

3.4.3 *Overlap*

There remain to be considered havi and nim sakil, a further two cycles with evident close links with other and more frequent cycles. Like fer'-i muhammes, the name nim ('half') sakil indicates an obvious derivational relationship, and although in not quite the same way as with the related pairs discussed above, it and sakil are connected at two different levels. One is immediately obvious: nim sakil may not be quite just the first half of sakil, but it is certainly identical with it for the first 18 of its 24 time units and, as ex. 4 shows, over this stretch it conforms fully with the constraints as formulated above. But a divergence now follows, for with time units 18-20 all being 0 it infringes constraint 5 ('the same entity cannot appear in more than two contiguous time units'). However, the structure of the latter part of nim sakil, it may be argued, is here exceptional, for if one considers the relationship between it and sakil from the end rather than the beginning, it will be seen that its last 12 time units are an

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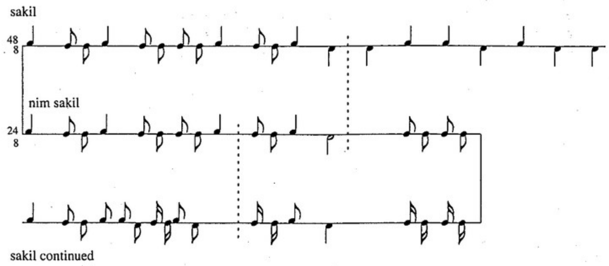
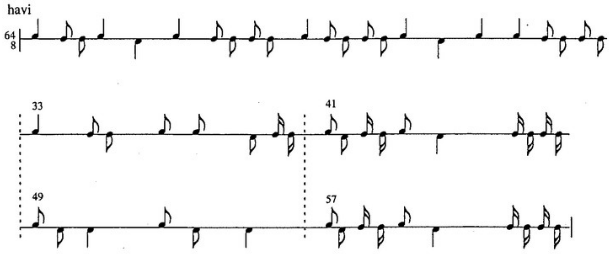
[32] One may conjecture that the reason lies ultimately in its origin. According to the account relayed by K. and U. Reinhard (*Musik der Türkei* (Band 1: die Kunstmusik), Wilhelmshaven: Heinrichshofen's Verlag, 1984, p. 209), it may be dated to 1543, when a rhythm played by French musicians so impressed Sultan Süleyman that he ordered his own musicians to adopt it. Whatever the original (possibly a ♩ 𝅗𝅥 *sarabande*, or even a *menuet*), a steady triple metre was obviously too unusual to leave unaltered, with the result that a further six time units were added to give, as in berefşan, a duple counterweight but, strangely, leaving an unbalanced structure with *düm* strokes being restricted to the first half and *tek* and related strokes to the second.



Example 4

augmentation of the last six of sakil, so that the unusual configuration of time units 17-20 corresponds to (and may well be derived from) the perfectly normal (in terms of the constraints) /d 0/ of time units 45 and 46 in sakil. But the extent of coincidence between sakil and nim sakil is by no means exceptional: this is a phenomenon common, in varying degrees, to all the longer simplex cycles, marginal as well as core (nim sakil, remel, hafif, sakil, havi and darb-ı fetih).

Before examining its nature and extent there is still the case of havi to consider, although here, too, the phenomenon of overlap is of significance. In fact, havi is the cycle that exhibits the highest degree of internal overlap: the last 16 time units are, in effect, a varied repetition of the preceding 16, as may be seen from ex. 5:

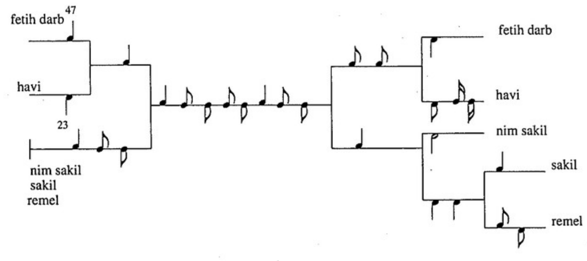


Example 5

Time units 41-8 and 57-64 are identical, while in the eight time units preceding each of them the same contrastive pattern of d vs. non-d qualities appears in time units 1, 3, 5 and 7. It could, consequently, be described as a cycle of 48 extended to 64 by varied repetition of its last 16 time units. It is this unique feature that both causes and explains the one divergence in havi from the constraints: the presence in time units 44-8 as well as in time units 60-4 of the formula /d t 0 tk tk/, which elsewhere has only been encountered at the end of cycles. Its first occurrence thus infringes constraint 2 ('tk tk can only appear in the last two time units of the cycle ...').

In support of the interpretation offered here of the internal articulation of havi may be cited that fact that if time units 1-48 are aligned with the 48 time units of sakil the two cycles are identical over the last 16 time units. The name havi (meaning 'containing, comprising') suggests that it may, indeed, have been made up of—or at least could be analysed in terms of—segments of other cycles, and in addition to the 16 time units held in common with sakil and then repeated with variations, one may point to the identity of time units 1-28 with time units 23-50 of darb-ı fetih. That leaves unaccounted for only time units 29-32 which, consisting of te ke te ke, can readily (but unimportantly) be matched elsewhere: significance does, however, attach to the more extensive parallels between time units 27-37 and time units 5-15 in sakil, and the even lengthier parallels between time units 25-39 and time units 49-63 in darb-ı fetih.

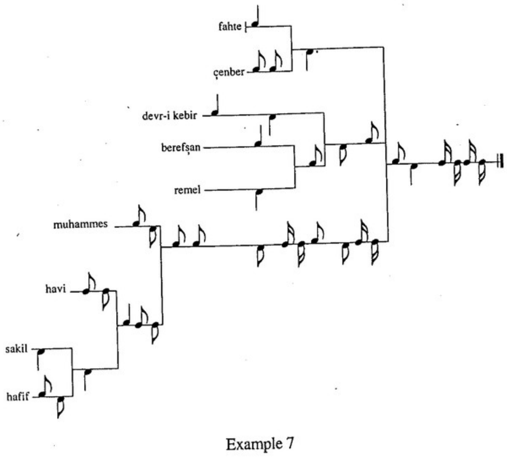
We thus have here a major area of overlap involving havi, sakil and darb-ı fetih. But given that its first 18 time units are identical with those of sakil, nim sakil can also be included, and there is even a fifth cycle involved, remel. Indeed, it will be seen from ex. 6 that the area of identity between remel and sakil is even greater than that between nim sakil and sakil, extending as far as time unit 21:



Example 6

Excluding the eccentric evsat, the only cycle of more than 16 time units not included in ex. 6 is hafif, in which only the latter part of this common core occurs. But if the first half of hafif differs somewhat from the other longer cycles, its opening does provide the last piece of the havi jigsaw puzzle, for time units 1-8 are identical with the first half of what has been called the varied repetition in havi of time units 41-8 which appears in time units 57-64.

In its second half, on the other hand, hafif is one of several cycles sharing a common formulaic ending, one which is by no means confined to the longer cycles:



Example 7

Striking, in fact, is the extent to which some of the shorter cycles coincide with each other as well as with segments of longer cycles. Thus fahte coincides with çenber over the last 8 of its 10 time units; devr-i kebir coincides with berefşan and remel over the last 7 of its 14 time units; and muhammes coincides with havi, sakil and hafif over the last 12 of its 16 time units. Since the initial differentiating segment is thus in some cases only a small proportion of the total the fact that it can be reduced yet further by a coincidence in time unit 1 suggests strongly that the element of contrast articulated in tandem by constraints 3 ('the first time unit must be occupied by d') and 4 ('the last time unit must be occupied by 0, ke or tk') is one of the most powerful and basic organizational principles (and even in evsat, where the order of events is reversed, the principle of initial/final contrast is still maintained).

3.4.4 *The non-occurring cycles*

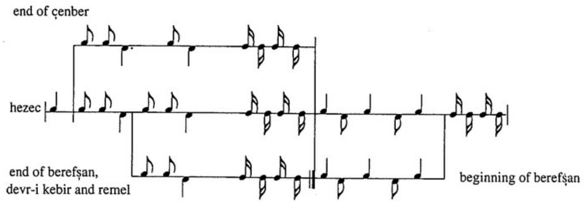
This reverse order is also encountered in horezm, one of the two cycles noted by Cantemir as being particularly rare (the other being hezec). With it, horezm combines the equally unusual segregation of qualities found in frenkçin (and adds, further, a feature otherwise found only in devr-i revan, that of having exactly the same spacing of percussions in each half). It is hardly surprising, therefore, to find that the resulting structure:

t 0 0 t 0 t 0 d 0 0 d 0 d 0

was only known to a restricted circle of experts. But the same seems to have applied to hezec, which looks much less unusual, at least to the extent that it begins with d and ends with tk tk:

d 0 d d t 0 d d t 0 tk tk d 0 t d 0 t d 0 tk tk

However, /tk tk/ also occurs internally, suggesting either an element of repetition, as with havi, or a combination of segments of other cycles. In the event, although the segment preceding and including the internal occurrence of /tk tk/ may be precisely identified with a stretch of the final formula common to berefşan, devr-i kebir and remel (ex. 7), it is also possible to see over a wider area (time units 3-12) a similarity with çenber, while what follows reinforces the connection with berefşan, for until the final /tk tk/ it is identical with its beginning:

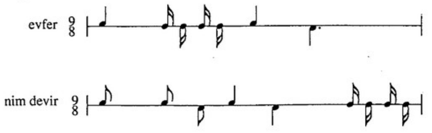


Example 8

We thus have a cycle which opens, unusually, with /d 0 d/ (infringing constraint 14), continues with material from two common cycles, proceeds from the end of the second of these to its beginning, continues until half-way through, and then just tacks on a /tk tk/ ending. All in all, however, hezec appears no more ramshackle or perverse a structure than havi, so that quite why it should have been regarded as an item of esoteric lore is unclear.

A third cycle, yek darb, receives no definition and need not detain us further.

There remain the three other cycles that fail to appear in Cantemir's collection: evfer, nim devir and türki darb. But the reason is not that they were marginal or esoteric: simply, they were restricted to the vocal repertoire.[33] For türki darb, unfortunately, no definition is given, and in the light of the lack of consensus among later accounts as to the structure of this cycle it may in the present context be disregarded. The definitions Cantemir gives for the other two are:



Example 9

As with the relationship between nim sakil and sakil, the name nim devir suggests that we should be dealing with a variation of half of another cycle, in this case devr-i kebir. What we encounter, however, is not variation but addition: nim devir reproduces exactly the first half of devr-i kebir and then, like hezec after the first half of berefşan, simply tacks on a final /tk tk/, thus bringing the total number of time units up to 9. In relation to the validity or otherwise of the constraints it may be noted that nim devir is relatively unproblematic, requiring only a minor adjustment to 2, while evfer provides yet another example, along with evsat, havi and hezec, of the possible non-final occurrence of /tk tk/. The nominal total number of time units in evfer, by far the most common of these three cycles, is the same as in nim devir, but given the possibility of retardation in the latter part of the cycle it may in practice have been a little more. It can, in any case, hardly be fortuitous that the flexibility of which Cantemir speaks relates not to tempo fluctuations in a string of regular and closely spaced percussions but to an area of low density defined as /d 0 t 0 0/, so that there is only one percussion between the onset of retardation and the commencement of the next cycle. This particular sequence is matched by the opening of fahte, so that it would be possible to describe evfer as beginning with the final four time units of hezec and ending with the first five of fahte. Both nim devir and evfer thus conform to the norms encountered among the instrumental cycles (or, more precisely, cycles that may be used in both vocal and instrumental pieces) and to that extent appear to embody no structural features that might conceivably justify or explain their being placed in a special category.

3.5 *Internal sequences*

Much of the above discussion has been concerned with identifying areas of overlap between cycles. While not fully succeeding in establishing relationships of a systematic nature, this has at least had the virtue of again drawing attention to the possibility of examining the smaller

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[33] For evfer and türki darb this is confirmed by Cantemir himself; but that the same also applied to nim devir is established by the evidence of the Ḥāfıẓ Post *güfte mecmuası*. A further cycle occurring quite frequently in this *güfte mecmuası*, but ignored by Cantemir, is devr-i hindi.

segments into which the cycles may be divided in order to see whether there are any indications of distributional regularity. Pending a case-by-case analysis of internal structure which will be largely dependent on melodic evidence, we may first consider a purely mechanical binary segmentation. This will distinguish simply between D (a stretch beginning with d) and T (a stretch beginning with t, te or tk). 0 has neutral status (i.e. can occur in both D and T). The length of D and T is thus defined negatively: each continues until the onset of the other. Table 2 represents the cycles (ordered according to the number of time units) simply by identifying the initial stretch and noting the number of subsequent switches (always odd, since the initial and final stretches cannot belong to the same category):

4	sofyan	D	1	16	berefşan	D	7
6	semai	D	3	16	fer‘-i muhammes	D	7
8	düyek	D	3	16	muhammes	D	7
9	evfer	D	3	22	hezec	D	9
9	nim devir	D	3	24	nim sakil	D	7
10	fahte	D	3	26	evsat	T	5
10	semai-i lenk	D	3	28	remel	D	11
12	çenber	D	5	32	hafif	D	17
12	frenkçin	D	1	48	sakil	D	19
14	devr-i kebir	D	5	64	havi	D	27
14	devr-i revan	D	3	88	darb-ı fetih	D	37
14	horezm	T	1				

Table 2

These figures help clarify one or two points already made. The total number of time units divided by the number of switches + 1 gives an average segment length, and within the limits set by semai at 1.5 and sakil at 2.8, this is clustered for the remaining common cycles (düyek, devr-i kebir, darb-ı fetih, fahte, muhammes, berefşan and çenber) within the range 2 to 2.5. In contrast, we find in the extremely rare horezm and frenkçin lengths of 6 and 7 respectively, and it would not be unreasonable to correlate their infrequency of occurrence with such structural marginality, even if in other cases the same explanation cannot be put forward: the other rare cycles (sofyan, hezec, remel and havi) fall within the mainstream 2 to 2.5 range (as also do the two (evfer and nim devir) reserved to the vocal repertoire. On the other hand, it may be observed that the three cycles in which there is only one switch (sofyan, frenkçin and horezm) are all extremely rare, which suggests that there was a general preference for a greater degree of qualitative contrast.

On the basis of this binary segmentation a general statement of the constituents of the cycles might be formulated simply as in table 3. Here 1 has structural consequences: it sets a limitation (a cycle beginning D must end with T, and vice versa) and could, without too much difficulty, be reformulated to give it the air of a phrase structure rule; but 2 is merely an inventory: it fails to provide any clue as to why the cycles are as they are. It does, it is true, convey one or two useful points about distribution, for example that in the overwhelming

1 a cycle consists of one or more alternations of D and T

2 D and T span from 1 to 8 time units each, and consist of:

D (with, indicated after each, the number of occurrences):

8 →	d 0 0 0 d 0 0 0	1	3 →	d 0 d	2
7 →	d 0 0 d 0 d 0	1		d 0 0	1
6 →	d d 0 d d 0	1	2 →	d d	15
	d 0 d 0 d 0	1		d 0	48
5 →	d 0 0 d 0	1	1 →	d	30
4 →	d 0 d d	1			
	d 0 d 0	3			

T:

8 →	t 0 0 0 te ke te ke	1	3 →	t 0 t	2
7 →	t 0 0 t 0 t 0	1		t t 0	7
6 →	te ke te ke tk tk	1		t 0 0	3
5 →	te ke te ke 0	2	2 →	tk tk	2
4 →	te ke te ke	9		t te-	9
	t t te ke	1		te ke	14
	t 0 te ke	3		t t	3
	t 0 tk tk	12		t 0	15
	t 0 t 0	5	1 →	te-	2
				t	8

Table 3

majority of cases d is followed by T, d T or 0 T, and that in T there is a much higher incidence of four time-unit elements. But even if we were to revert to the previous approach and succeed, despite the intractable problems that have emerged in the course of discussion, in constructing a more detailed and subtle set of constraints that would exclude all non-occurring strings, many would have to be *ad hoc* formulations and, consequently, uninteresting. Even when the same phenomenon occurs in more than one cycle an appropriate description may be lacking in explanatory power: it may be observed, say, that te- only occurs in the environment of a preceding d or t and a following d, but it can hardly be claimed that any broader structural principle has been illuminated by this observation. More generally, to state arbitrarily that, say, a cycle may not consist of a total of 5, 7 or 11 time units is both unrevealing and lacking in logical justification (especially as such cycles appear later),[34] and it may be suggested, simply, that the range of structures in existence is far from exhausting the combinatorial possibilities their internal sequences imply.

Such is not to imply any deficiency. Rather, there are good reasons for restricting choice, for the wider the variety the greater the potential for random sequences, and in a long cycle unpredictability could provide severe obstacles to memorization. In general, three factors can be identified as broad structural principles contributing to the creation of cycles that, even if

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[34] And already among Cantemir's own pieces we may note in 289 the innovation of a form of darbeyn in which instead of the juxtaposition of two cycle of 14 + 16 time units we have 7 + 8.

lengthy and complex, can hardly be characterized as wilful: symmetry and balance; shared strings (particularly in the final section); and internal repetition.

Considering just time-unit totals and the number of D T alternations, it may be noted that in the three cycles consisting of just D + T (or T + D) the two parts contain an equal number of time units:

sofyan	D (2)	T (2)
frenkçin	D (6)	T (6)
horezm	T (7)	D (7)

with, further, both parts of horezm having the same internal articulation (x 0 0 x 0 x 0); and of the larger class of cycles where there is more than one alternation a further seven can be divided into halves of equal length each containing the same number of alternations:

semai	D T (3)	fer'-i muhammes	D T D T (8)
düyek	D T (4)	remel	D T D T D T (14)
fahte	D T (5)	hafif	D T D T D T D T (16)
devr-i revan	D T (7)		

In devr-i revan both halves are articulated as in horezm, and maximum symmetry is achieved by their being differentiated by just a single contrast:

d 0 0 d 0 t 0 /
d 0 0 t 0 t 0

It may be noted that, as a result, the shift from D to T occurs at a different point in each half and, with the sole exception of semai, the same is true of the other cycles in this group. In a further two cycles we can also discern a division into halves, even though equality in the number of time units is not matched by equality in the number of alternations:

muhammes	D T D T D T (8)	+	D T D T (8)
evsat	T D T D (13)	+	T D (13)

What justifies regarding them in this light is, essentially, the nature and extent of parallelism between the halves. In evsat, for example, we find a degree of differentiation almost as low as that in devr-i revan:

te te ke ke 0 d 0 t 0 d 0 d 0 /
te te ke ke 0 d 0 0 0 d 0 0 0

and while there is no comparable parallelism in muhammes we may note the telling axial symmetry around the mid point:

(5) + d t te- / d t te- + (5)

In other cases the division into halves, far from being revealed, is partially disguised by the automatic process of D T segmentation, and here we need to revert to the notion that cycles may be regarded as aggregates of smaller segments. What is involved is not merely an appeal to the *a priori* arithmetical possibilities of division (which would allow a reduction of everything to additive combinations of twos and threes) but, more securely and interestingly, the evidence provided by the regularities that emerge from a comparison of the metrical underlay with the rhythmic articulation of the melody. This aspect will be examined below in relation to individual cycles, and the results are anticipated here in relation to the three cases that concern us. The segment structure of these is as follows:

semai-i lenk	3 +	2 +	
	d 0 d	t 0	
		2 +	3
		t 0	d t 0
devr-i kebir	3 +	4 +	
	d d t	d 0 t 0	
	3 +	4	
	t d d	t 0 tk tk	
berefşan	3 +	3 +	2 +
	d 0 t	d 0 t	d 0
	4 +	4	
	d t d d	t 0 tk tk	

Table 4

In the first case we thus have retrograde symmetry in the organization of the segments, and in the second retrograde symmetry in the organization of percussions within the parallel first and third segments, while in the third case (where the support of the melodic argument is most needed) we have asymmetrical halves with internal repetition within the first. But if these cycles may be added to the inventory of those divisible into halves, by the same criterion of segment division fahte would need to be excluded, so that we reach a final total of 14 (out of 23). The majority are relatively short, and it is psychologically plausible to assume that the longer the cycle the more difficult it is to perceive its two halves as meaningful units within which patterns of balance and symmetry could facilitate retention and recognition of the whole. It may be suspected, accordingly, that the fact that remel and hafif, not to speak of the even longer cycles, fall into equal halves is fortuitous, and that in these two cycles coherence is ensured, rather, by patterns of internal repetition and the inclusion of a common formulaic ending.

The distribution of this ending has been given above (ex. 7), and further comment is unnecessary, except perhaps to reiterate that in varying dosages it is found in no fewer than nine cases. These include, among the shorter cycles, fahte, of 10 time units, for which the significance of the possible division into halves has been called into question, and çenber, of 12 time units, for which there is no such symmetrical division, and it is not inconceivable that in the absence of other internal signposts it was simply the extensive use of this common area (the two are identical over their last 8 time units) that made them satisfactory structures.

Another shorter cycle characterized by extensive use of shared strings is nim devir, all of which can be mapped onto devr-i kebir (time units 1-7 being identical with time units 1-7 in devr-i kebir, and time units 6-9 with time units 11-14). Such strings have also been identified (in exs. 4-6) among several of the longer cycles, and there can be little doubt that these provide evidence for a process of derivation resulting in a number of cycles that are closely related and hence less difficult to master than they otherwise might have been. At the same time it may be suggested that for each individual cycle within this group, which consists in all of hezec, nim sakil, remel, hafif, sakil, havi and darb-ı fetih, cohesion is provided by patterns of internal repetition which are readily visible when the various segments or segment families are displayed as in table 5. Apparent from this is, again, a clear preference for a very restricted range of structures: in zone 1 the formula /d 0 te ke (te ke)/ occurs 22 times (out of a total of 29); in zone 2 /d 0 t 0 (t 0)/ occurs nine times (out of a total of twelve); and in zone 3 only /d t t 0/ occurs (seven times). Zone 4 is a little more complex, with no one formula dominant, but still with only a narrow range of possibilities; and in zone 5 we encounter in most cases the familiar formulaic ending /t 0 tk tk/.

Striking about the first of these formulae (together with the variant /d 0 t t (te ke)/ found only in darb-ı fetih) is that although there again seem to be no rules that control exactly how often it should occur, the distribution of its variants is not random, and could be stated, informally, as concatenation rules. Thus:

- If it is cycle initial, the shorter variant is used;
  if it is then immediately repeated, then in the longer variant;
  if it is then repeated a second time, then in the shorter variant;
  and this second repetition is followed by a switch to zone 2.
- If the longer variant is (re)introduced after intervening material, the formula is immediately repeated (either long or short).
- If the formula is not immediately repeated there is either
  a switch to zones 2 or 3 followed by an immediate return to the formula (either long or short)
  or a switch to zone 4 with no subsequent return to a preceding zone.

Similarly, but much more simply, one may note the following contrasts in patterns of repetition:

- In zone 2, /d 0 t 0/ is immediately repeated in only one instance and the longer variant /d 0 t 0 t 0/ never;
- while in zone 3, /d t t 0/ is always repeated immediately.

Zone 4 is also highly formulaic, and may be stated as:

(d d t $^{\text{te-}}/_{0}$ →)
d t $^{\text{te-}}/_{\text{d}}$ d → zone 5

(where te- in the first segment collocates with te- in the second).

	1	2	3	4	5
hezec					
	d 0 d d				
	t 0 d d				t 0 tk tk
	d 0 tx2				d 0 tk tk
nim sakil					
	d 0 te ke				
	d 0 te ke te ke				
	d 0 te ke	d 0 t 0 0 0			te ke te ke
remel					
	d 0 te ke				
	d 0 te ke te ke				
	d 0 te ke	d 0 t 0 t 0		d t d d	t 0 tk tk
hafif					
			d t t 0x2		
	d 0 te ke		d t t 0		
	d 0 te ke			d d t te-	
				d t te- d	t 0 tk tk
sakil					
	d 0 te ke				
	d 0 te ke te ke				
	d 0 te ke	d 0 t 0 t 0			
		d 0 d 0 t 0			
		d 0 t 0 t 0			
	d 0 te ke			d d t te-	
				d t te- d	t 0 tk tk
havi					
	d 0 te ke	d 0 t 0			
	d 0 te ke te kex2	d 0 t 0 d 0			
	d 0 te ke te ke				
	d 0 te ke			d d t te-	
				d t te- d	t 0 tk tk
			d t t 0x2		
				d t te- d	t 0 tk tk
darb-ı fetih					
	d 0 t t				
	d 0 t t te ke				
	d 0 t t	d 0 t 0x2			
	d 0 te ke	d 0 t 0			
	d 0 te ke te kex2	d 0 t 0			
		d 0 d 0			
	d 0 te ke te ke				
	d 0 te ke			d d t 0	
				d t d d	t 0 te ke
			d t t 0x2	d t d d	t 0 te ke

Table 5

In only one case, hafif, is zone 1 not initial, and only here does arrival at (the initial) zone 3 not mark a point of no return.

Finally, it may be noted that there is a high degree of uniformity in the length of the constituent segments: only in (the extremely rare) hezec do we find a repeated segment of three time units; elsewhere the uniform length is 4 or 6 (analysable as 4 + 2). Thus although these cycles are too varied to be considered simple mechanical constructs, it is clear that their internal organization is marked by constraints and ordering preferences that make various stretches more predictable and hence aid the process of memorizing lengthy sequences.

Nevertheless, for all that table 5 is helpful in clarifying patterns of repetition, it should not be claimed that it necessarily matches emic perceptions of the structure of these cycles. The segmentation it proposes is partly intuitive, and in places other equally valid arrangements could be substituted. Thus in hezec it could be argued that the initial /d 0 d d/ would fit better in zone 2, where it could be viewed as a variant of /d 0 d 0/, and likewise that /d 0 t/ could with equal justification be assigned to zone 2 also, or that it should preferably be placed in zone 5 along with all the other final segments. In nim sakil the final /te ke te ke/ which is assigned to zone 5 is exceptional in not containing 0, and one might wish to consider reanalysing the last two segments as /d 0 t 0/ (zone 2) + /0 0 te ke te ke/ (zone 1), although the latter would be even more exceptional, being acephalic. More generally, it could be argued that the divisions adopted embody the unjustified assumption that within each segment there is a minimum of two percussions; and that if no such assumption is made it would be possible, for example, to produce a more precise alignment of the material assembled in zone 2 by separating it into /d 0 (d 0)/ and /t 0 (t 0)/ groups.

Problems of this nature multiply when the same kind of segmentation is attempted with the shorter cycles. As the previous discussion has made clear, they are not characterized by a similar degree of regularity and predictability: in some, coherence and memorability are ensured by a different technique, division into symmetrical halves, and in any case it might be thought that the shorter the cycle the less the need for sequencing constraints. Nevertheless, it would be reasonable to expect that, in addition to the common formula with which many cycles end, /t 0 tk tk/, some of the percussion patterns sorted into the various zones in table 5 would appear in them, and there are, indeed, three shorter cycles that could be integrated into table 5 without introducing any further variants:

muhammes				
			d t te- d	
			d d t te-	
			d t te- d	t 0 tk tk
ferʿ-i muhammes				
d 0 te ke	d 0 t 0		d t d d	t 0 te ke
sofyan				
d 0 te ke				

Table 6

However, the greater variety encountered overall means that the remaining cycles contain segments that are less easily assigned to one zone or another. But there are two features they have in common: one, shared also by all three cycles in table 6, is the total absence of the sequence /d t t 0/, the sole occupant of zone 3 in table 5; the other, shared also by muhammes in table 6, is the total and far more surprising absence of the extremely common zone 1 sequence /d 0 te te/ (and likewise its variant /d 0 t t/). The corresponding zones in table 7 therefore contain different material, and for the whole display the main claim to be made is that it provides visual clarification of various similarities and parallels. Thus rather than explore the merits of alternative ways of dividing and positioning this segment or that,[35] attention may simply be drawn to the fact that certain forms of representation are derived from factors discussed above, for example, the internal symmetry of devr-i kebir, which suggests /d d t/ + /d 0 t 0/ + /t ... / rather than, say, /d d t d 0/ + /t 0 t/), while others, such as the preference in the internal segmentation of berefşan for /d 0/ + /d t d d/ over /d 0 d/ + t d d/, anticipate melodic evidence. But even if just one possible form of representation among many, table 7 does at least indicate that despite the greater degree of internal variation the number of combinations employed is still quite limited: in relation to its length each cycle draws upon fewer zones than it could (so that reference to table 6 suggests that fer‘-i muhammes is somewhat exceptional), and as a final generalization it may be observed that within each zone a segment may be repeated immediately (whether in identical or varied form) no more than once (so that reference to table 6 suggests that muhammes is likewise somewhat exceptional).

There is one final topic to be considered, for excluded from the above has been any discussion of darbeyn and zencir. It is true that at one level they are no more than aggregates of cycles which are included in table 7, and to that extent it can be claimed that due consideration has already been given to their constituent parts. But the questions remain of why these should occur in the order they do; and why, when there are two cycles with the same number of time units available for inclusion, one should have been preferred to the other. To the former there seems to be no obvious answer: if all orders are theoretically possible the preference for a sequence of cycles of increasing length could be simply a given. But one might nevertheless wonder why the deliberately symmetrical *n*, *n*+2, *n*+4 ... series making up zencir could not have begun with sofyan (4 time units) and continued via semai (6), the end of which would, incidentally, have provided a punning overlap with the beginning of the following düyek (/d t 0/ + /d t 0 t/. Here, perhaps, less than purely logical reasons could have had a role to play: sofyan might not have been a serious candidate because it was marginal; and semai could have been unavailable—fenced off in a special category as the cycle specifically associated with a type of piece considered separate from the main instrumental peşrev group, even if formally indistinguishable.

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[35] It might be thought that as certain cycles share their names with poetic metres (e.g. hafif, remel) there might be a structural connexion and, therefore, a reflex within the cycle of the division of the poetic metre into feet. But comparison of, say, the prosodic and rhythmic structures of remel:

— ᴗ — — — ᴗ — — — ᴗ — — — ᴗ —
d 0 te ke d 0 te ke te ke d 0 te ke d 0 t 0 t 0 d t d d t 0 tk tk

is sufficient to demonstrate that this is not the case.

1	2	3	4	5	6
evsat					
	te ke				
	te ke 0	d 0 t 0			
		d 0 d 0			
	te ke				
	te ke 0	d 0 0 0x2			
frenkçin					
				d d 0x2	
	te ke				
	te ke tk tk				
devr-i kebir					
				d d t	
		d 0 t 0		t d d	t 0 te ke
nim devir					
				d d t	
		d 0			
					t 0 te ke
berefşan					
d 0 tx2		d 0		d t d d	t 0 tk tk
çenber					
				d te- d d	
t 0 0 d					
					t 0 tk tk
fahte					
		d 0			
t 0 0 d					t 0 tk tk
semai-i lenk					
		d 0	d t 0		
		t 0	d t 0		
düyek					
			d t 0 t		
		d 0 t 0			
semai					
			d t t		
			d t 0		
evfer					
		d 0 tk tk			
		d 0			
t 0 0					
devr-i revan					
d 0 0		d 0 t 0			
d 0 0		t 0 t 0			
horezm					
t 0 0		t 0 t 0			
d 0 0		d 0 d 0			

Table 7

At the same time, it is pertinent to observe that the particular set of cycles making up zencir has a property that would be lost if the series were extended or redefined to include one or both of the shorter cycles: it divides into two equal halves (of 30 time units each), with a further balance being provided by the fact that the cadence formula (zone 6 in table 7) occurs twice in each half (even if it does not subdivide them equally), and that this symmetry was perceived to be significant is shown by the evidence of melodic structure, which sometimes marks the end of the first half by a secondary cadence.

The autonomy of darbeyn, which is identical with the second half of zencir, is thus hardly surprising. Indeed, one might have expected that the first half, consisting of düyek + fahte + çenber, would also enjoy an independent existence. Why this did not happen is unclear, but one possible clue is provided yet again by the predominant patterns of melodic articulation in zencir, for whereas the unity of the second half is underlined (as also when separately manifested as darbeyn) by the fact that the cadence formula in the percussion underlay in the first of its two cycles normally has no corresponding melodic cadence material, the same is not true of the first half. Here melodic cadence material occurs just as frequently in the second cycle, fahte, as in the final one, çenber, and, indeed, sometimes appears in both, thus inhibiting a comparable perception of the first half as an unbroken entity.

The second question refers to the fact that alongside fahte, çenber and berefşan, which are included in zencir, we have semai-i lenk, frenkçin and muhammes, also with 10, 12 and 16 time units respectively. Preference for fahte can readily be explained by the fact that semai-i lenk is relatively rare; is associated with semai and therefore in a separate category; and, furthermore, may have been anomalous because of its association with a faster tempo.[36] Similarly, frenkçin is rare in the extreme, and it is also tempting to add that were it to be substituted for çenber the longest string of time units devoid of 0 in zencir would jump from 6 to a very unusual 10 (te ke te ke tk tk d d t d). However, reference to the percussion pattern of muhammes would suggest that this last observation cannot really serve as the basis for a valid objection to the hypothetical inclusion of frenkçin; and if muhammes were to be substituted for berefşan the number would jump dramatically to an even more unusual 15 (tk tk d t te- d d d t te- d t te- d t), but even this is not inconceivable, for exactly the same sequence appears in pieces in muhammes (specifically, from time unit 15 in one cycle to time unit 13 of the next). This may well reinforce the point already made about the rather exceptional nature of muhammes, but evidently can not disqualify it as a potential component of zencir, and it is certainly just as prominent as berefşan in the repertoire as a whole. However, if forced to speculate—and it can be no more than speculation—on the reasons for the choice of the latter, it might tentatively be argued that in combination with devr-i kebir it provides a more satisfactory, because more diverse, sequence of segments: devr-i kebir predominantly occupies zones 5 and 6 in table 7, and it is the same two zones that would account for all of muhammes, whereas with berefşan we have the contrast of the initial repetition of zone 1.

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[36] To which one may add the simpler argument (cf. Feldman's discussion, op. cit., pp. 480-3) that it was in all probability a recent innovation and therefore postdates the creation of zencir. It is noteworthy that there are no examples notated by 'Alī Ufḳī.

3.6 *Melodic mapping*

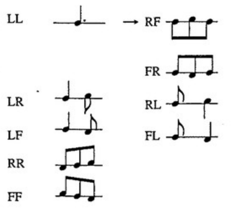
The ensuing discussion of patterns of melodic articulation within each individual cycle will not revert to the description articulated in terms of alternating stretches labelled D and T. As noted both at the outset and during the course of the above discussion of zencir, for each cycle there are preferred patterns which permeate the rhythmic structure of the melody, and the regularities that can be observed do not correlate very closely (or helpfully) with the stretches resulting from this simple formal approach. But although it seems fairly clear that the normal contours of the melodic map are best described in different terms it is not readily apparent that these can be calibrated with the same precision, so that the following account has no pretensions to axiomatic rigour; it will, rather, rely heavily on two concepts involving empirical and, up to a point, intuitive judgements.

Accepting that over much of the repertoire the amount of melodic material contained in a complete cycle—let alone a whole (sub)section if consisting of more than one cycle—is, for comparative purposes, unmanageably large, some form of dismemberment is required. The segmentation to be used here will frequently be identical with that displayed in tables 5-7 (hardly surprising, since melodic evidence was adduced to justify one or two of the options taken in table 7). But identity is not automatic and universal, and to avoid confusion a terminological distinction may be drawn, reference being made henceforth not to segments but to cells. A cell is a pragmatic device useful for purposes of display rather than an analytical tool, and should be understood as nothing more precise than a conveniently small division of a given cycle arrived at on the basis, primarily, of observable regularities in the rhythmic articulation of the melody, but with consideration also being given to the pattern of percussions in the metrical underlay. In certain cycles (or parts of a cycle) there is sufficient congruence between the two to allow fairly firm conclusions to be drawn about the most appropriate cell division; but in others there is more variation, and the proposals made will be correspondingly more tentative.

With the local patterns of rhythmic articulation which recur in the melody at the same or similar points in a given cycle and thus serve to characterize it are frequently associated local patterns of pitch organization. To the imprecise concept of the cell we may therefore add the equally imprecise but nevertheless helpful concept of the melodic formula. The imprecision relates to two areas of vagueness: deciding where it would be productive to invoke the concept, and (as with the cell) deciding where its boundaries lie. The former may be illustrated by the simple fact that the greater part of the repertoire can be accounted for by a single melodic device: moving to an adjacent pitch; but this is so general and context-free as to be devoid of explanatory power, and to that extent, although evidently identifiable as formulaic, is not worth further consideration. On the other hand, in cases where it is obviously helpful to speak of a formula, its domain can be difficult to pin down: certain formulae may be thought of as having a fixed core but fuzzy edges, with the result, for example, that questions of overlap versus concatenation cannot always be resolved. It is also apparent that there are no objective criteria to determine on the one hand how may occurrences of a given feature are required before it can justifiably be classified as formulaic, and on the other how elastic that feature can be without slipping from the category of formula with variants, to the rather vaguer one of a loose formulaic family or, ultimately, resolving into similar but independent and possibly non-formulaic features. Much of the following classification relies, therefore, on rule of thumb; but in most cases the patterns it reveals are, it is hoped, sufficiently regular to allow certain conclusions to be drawn with confidence.

When considering the mapping of the melody onto the rhythmic cycle, it may be useful to be reminded of the virtually limitless number of theoretically possible moves. Even ignoring such common phenomena as ties across cell boundaries and the division of time units into halves we still have four possible articulations of duration for cell 1 (3, 2+1, 1+2, 1+1+1), nine for cell 5, and consequently for the cycle as a whole (4 x 4 x 2 x 9 x 9 =) 2592 possibilities; and when we project onto these the various permutations of pitch organization both within cells and between them the total for the cycle is multiplied many times over: even assuming in each cell that the total number of combinations is restricted by the extremely severe constraint that each subsequent attack (if there is one) must be on an adjacent pitch, there are three possibilities for a cell of two time units, nine for one of three, and 27 for one of four. Consequently, it seems clear that investigation of the degree of formulaicity in the repertoire needs to proceed myopically, examining first individual cells. For ease of reference, it may be useful to tabulate some of the basic possibilities in advance of the discussion of each individual cycle. Assuming that in the majority of cycles melodies may be analysed in terms of cells of three of four time units, an initial set of potentially formulaic moves may be derived from the general preference for stepwise movement. Ignoring possible rhythmic subdivision of a given time unit these may be tabulated as follows, and coded for future reference with the abbreviations L, R and F ('level', 'rising' and 'falling', respectively):

Cells of three time units



Cells of four time units

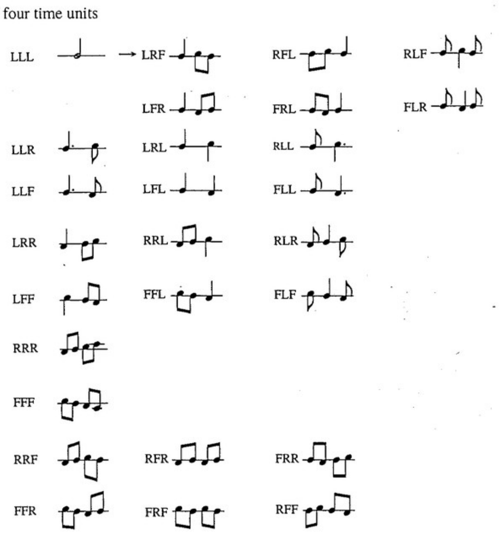


Table 8

3.6.1 *berefşan*

The justification offered for the rather protracted examination of the berefşan corpus that follows is that it displays in detail the descriptive and analytical methodology to be used throughout (if not always adhered to rigidly), thus allowing the discussion of the other cycles to take certain steps for granted and be somewhat more compact.

There are three reasons for beginning with this cycle. It has a substantial but not overwhelmingly large corpus; many of the pieces show very similar configurations, so that establishing most of the cell boundaries is relatively uncontroversial; and it is of sufficient length and internal diversity to show a variety of patterns of melodic behaviour at different stages in the cycle.

The following 17 pieces are in berefşan:

44-50, 99, 148, 167, 227, 279, 281, 304, 306, 319, 339 and to these may be added the berefşan segment of the pieces in darbeyn:

151, 154, 215, 289,[37] 303, 332

and zencir:

108-11, 173, 188

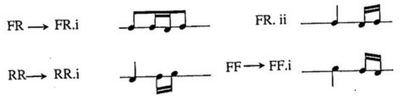
There is, finally, 73 (değişme), which changes cycle from section to section, and has H3 in berefşan.[38] We may take as an initial sample the first seven berefşan pieces (44-50), which yield, fortuitously, a total of 125 cycles = 2000 time units.[39]

The pattern of percussions in berefşan is, it may be recalled:

d 0 t d 0 t d 0 d t d d t 0 tk tk

and in the light of the initial /d 0 t/ + /d 0 t/ repetition the suggestion that this might be viewed as a potential 3 + 3 cell structure seems uncontroversial. But the remainder is not quite so straightforward, for in addition to the 2 + 4 + 4 division embodied in the segmentation given in table 7 it would be possible to propose, amongst others, 2 + 2 + 6 or 2 + 3 + 5. At this point reference to patterns of melodic articulation is required in order to narrow the range of possible options, and although there are several cases of a single pitch occupying the last five time units, especially in the final cadence, four is more usual, which allows us to arrive at 3 + 3 + 6 + 4 as the most common articulation of the cycle as a whole. The intermediate stretch of 6 seems most readily divisible into 2 + 4, although it will be seen that in some pieces the boundary between them is not as clearly established as in others, and a degree of hesitation or fluidity in this area might be suggested by notating the presumed five constituent cells as 3 + 3 + (2 + 4) + 4.

We may consider first the range of configurations encountered in cells 1 and 2, which for present purposes can be conflated (and despite certain differences in the distribution that will be considered below the fact that this is possible is a strong argument for the cell division proposed). The most common options are in fact characterized by the pitch constraint mentioned above, which restricts the total to the nine possibilities listed in table 8, of which all except RL and FL occur. To the remaining seven may be added a further four with a subdivided time unit which can reasonably be considered variants:



Example 10

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[37] 289 differs from the remainder in containing only a truncated form of its two constitutent cycles.

[38] Of which 44, 49, 167, 306; 151, 154; 108; and 73 are also notated by ‘Alī Ufḳī.

[39] That is, as literally presented in Part i. Unless otherwise specified, all the figures relating to the incidence of formulae in what follows will not differentiate between sections with and without fully written-out repeats. Given the sizes of the samples examined the statistical distortion that results is minimal.

Of the seven principal structures six occur in both cells, but much more frequently in one, while RF appears only in cell 1. The variants are also unequally distributed, as can be seen from table 9, which gives the incidence of all eleven structures:

	cell 1	cell 2
LL	14	8
RF	9	0
FR	7	17
FR.i	0	2
FR.ii	0	1
LR	11	28
LF	28	17
RR	26	10
RR.i	0	4
FF	16	25
FF.i	5	0
	116	112

Table 9

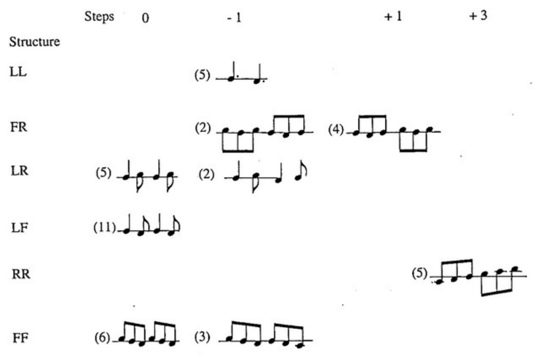
They thus comprise a total of 228 (out of 250) or 91% of the whole area.

Table 10 shows the ways in which the principal structures concatenate amongst themselves:

preceded by	structure	followed by
LL, RR	LL	LL, FR, LR
-	RF	RR, FF
LL, FR, LF, RR	FR	FR
LL, LR, LF, RR	LR	LR
LF	LF	FR, LR, LF, FF
RF, RR, FF	RR	LL, FR, LR, RR, FF
RF, LF, RR, FF	FF	RR, FF

Table 10

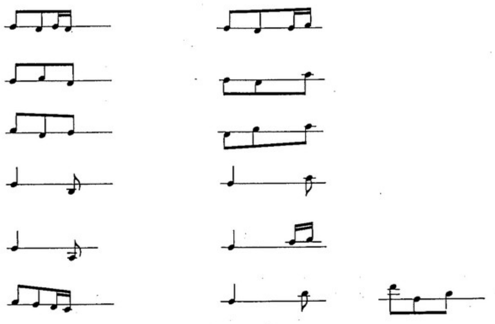
It will be seen that LL, FR, LR, LF, RR and FF may occur in cells 1 and 2 in the same cycle, and this form of repetition is sufficiently common (occurring in no fewer than 43 cycles, 34% of the total) to be deemed a standard compositional device. The manner of repetition is also highly conventionalized, as is apparent from ex. 11, which indicates the number of pitch steps that occur between the initial pitches of the two cells and gives in brackets the incidence of each type of repetition. Thus in three cases the relative positions are always the same, LL



Example 11

descending, LF remaining level, and RR forming a rising scale. It may also be noted that in these repetitions the first pitch of cell 2 is never the same as the final pitch of cell 1.

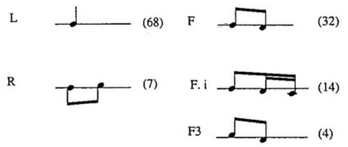
The remaining configurations, some of which are attested only once or twice, are:



Example 12

For the moment these may simply be placed on record, although it will become apparent from the ensuing discussion that some of them may also be considered formulaic, either in their own right or as less frequent variants (thereby raising the percentage of formulaic material in cells 1 and 2 above the 91% already recorded by the structures listed in ex. 10).

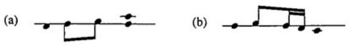
For cell 3 there are only five articulations, of which one (F3, the number indicating the size of the interval) is restricted to one piece, 44, while the most common two (L and F) account for 100 of the total of 125 cycles:



(The incidence of each is added after in brackets.)

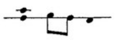
Example 13

That the range of options should be so limited suggests that the markedly formulaic character manifested in cells 1 and 2 is not suddenly diluted in cell 3. However, since the move to an adjacent pitch found with L, F and F.i is ubiquitous it may be queried whether it is productive to isolate such a confined space and tag at least the more common options as separate formulae. In fact, when the contexts of occurrence of the various manifestations of cell 3 is compared with those of the principal configurations in cells 1 and 2, it emerges that except for L the range of preceding and following intervals is somewhat reduced, and as some occur only once or twice it becomes possible to discern standard transitions to and/or from cell 3, in other words to detect formulae of which cell 3 forms only a part. Thus in every instance but one, R follows the pitch below; while again in every instance but one, F.i also follows the pitch below and, further, in nine cases is also followed by the pitch below, thus yielding the standard shapes:



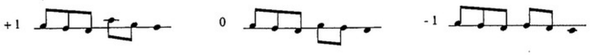
Example 14

Even more striking is that of the 32 instances of F, all but two are followed by the pitch below, while it is normally preceded by either the pitch above (9 instances) or the pitch below (14 instances), thus providing a retrograde image of 14a and closely resembling 14b:



Example 15

Further, with regard to concatenation with the principal configurations in cell 2 (table 9) it may be noted that there is no case of F following LL, whereas it follows FF no fewer than 13 times, always beginning, in relation to the initial note of FF, at pitches +1, 0 or -1:



Example 16

Among the 68 instances of L no particular combinatorial pattern predominates. It quite frequently follows repetition in cells 1 and 2, but the particular types found tend to be concentrated in single pieces, so that at this stage it is not clear whether or not they are representative of the repertoire as a whole. Of more significance is the fact that in addition to being followed by the next pitch above or below, L is equally commonly followed by a continuation of the same pitch unmarked by a separate attack: this occurs on no fewer than 34 occasions,[40] and the continuation is always for one time unit only, with the following time unit either one pitch step below (in 27 cases) or two (in 7). Thus in 27% of the sample time units 7-10 consist of the formula LLF (or the variant LLF3). At the same time, we are provided here with a strong indication that the boundary between cells 3 and 4 (which, it may be recalled, were tentatively bracketed as (2 + 4)) is comparatively permeable, in other words that considered alone melodic articulation indicates that in some cycles there is good case for regarding the divisions 3 + 3 or 4 + 2 as equally valid, and in support of the former may be cited the evidence of ex. 16, where the standard continuation beyond cell 3 points to a sequential 3 + 3 articulation beginning in cell 2.[41] In the zone made up of cells 3 and 4 the melodic patterns thus seem to demonstrate a certain independence of those indicated by the percussion underlay (and particularly by the distribution of d): /d 0 d t d d/ may suggest 2 + 4 as the most likely division, but although this is reflected in the melody to the extent that time unit 9 (the onset of cell 4) is marked by an attack in the majority of cycles, the frequent occurrence of LLF and LLF3 (always with only two attacks) indicates that the onset of the second half of the cycle did not need to be marked regularly.

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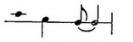
[40] To which can be added one case in which the following time unit does not change pitch, but is notated with a separate attack.

[41] A possible 3 + 3 + 3 + 3 + 4 articulation of the cycle as a whole is evident in e.g. 45 H2a 2 and 46 H2a 2, H2b 1 and 2 and H3a 1.

It is, consequently, hardly surprising to encounter a rather greater degree of variety, which might suggest a lower level of formulaicity, in cell 4. Further, it is certainly not the case that the two final 4 + 4 cells exhibit the same order of similarity as the two initial 3 + 3 cells. That cells 4 and 5 could hardly be conflated in the same way as cells 1 and 2 was in any case to be expected because cell 5 is frequently host to the finalis, but even when it is not the melodic strategies employed there are generally different from those in the preceding cell. They are also far easier to categorize, for the absence of internal pitch change characteristic of (sub)section-final cadences is also common in non-final cycles: time units 13-16 consist of LLL with only the one initial attack on time unit 13 in no fewer than 53 cycles (42% of the total). In the great majority of cases this is preceded in time units 11 and 12 either by two rising pitches below (15 occurrences) or two falling pitches above (28 occurrences), and these cycle-final complexes, RRLLL and FFLLL, must also be deemed formulaic.

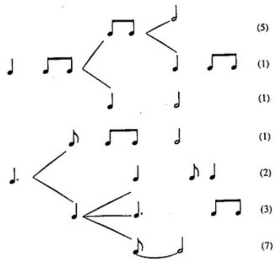
To them should be added what is with 17 occurrences the most common cadence formula. But here the final attack occurs in time unit 12, with the finalis being preceded in time units 9-11 by two falling pitches:



Example 17

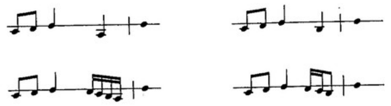
and as it can hardly be fortuitous that the final attack in this formula should coincide with the final d of the percussion underlay, the contrast between it and RRLLL or FFLLL suggests, again, the possible coexistence of alternative perceptions of the structure of the cycle. Alongside the 3 + 3 + (2 + 4) + 4 originally proposed we may therefore consider 3 + 3 + 5 + 5 (irrespective of whether or how the first five might be subdivided), and a division of this order is apparent in particular in 49. The inventory of the rhythmic articulation of time units 7-16 in this piece is given in ex. 18 (with, in brackets, the number of occurrences of each pattern). Here the top three patterns accord with the (2 + 4) + 4 division, while the more numerous bottom three manifestly do not, and it may be added that the final (3 + 2) + 5 pattern (and the descending pitch contour to which it corresponds) is not confined to cadences, appearing also in three cycles that are not (sub)section final. This particular shape has been noted repeatedly in the modal analyses and is evidently not cycle-specific, but it remains to be seen whether it is particularly associated with those cycles which have in common with berefşan the /d t 0 tk tk/ ending.

With a combined incidence of 60 occurrences (48% of the total) the three cycle endings that have been defined above are clearly dominant, but there are others that also deserve to be considered formulaic, in the first place those that can be added to this group as variants. To be noted in particular is a breakage of the final long note when there is no change of pitch at the beginning of the next cycle, typically articulated by the addition in the final two time units



Example 18

of a lower fifth or fourth,[42] with the interval sometimes filled in to create a descending scale:



Example 19

The fact that in every instance two rising pitch steps precede reinforces the interpretation of these as variants of RRLLL.

Predominant among the remaining configurations for cell 5 in those cycles where a final (2 + 4) + 4 division seems more appropriate are stepwise ascending and descending movements familiar from table 8. Those occurring more than twice are:

FFF	(6)	RRR	(5)
LFF	(7)		
LLF	(4)		

With only one exception, FFF and RRR embody a continuation of a scalar movement beginning one or two time units earlier, so that the whole stretch can reasonably be regarded

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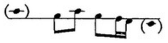
[42] We also find one instance, in 50, of the same phenomenon occurring where the next cycle begins a third higher (thus forming a triad, in this case *d A f*).

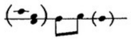
as formulaic. There remain a further 11 articulations of cell 5, but only one occurs more than twice. This may be classified as a variant of LFF, and is always preceded by a higher and followed by a lower pitch:



Example 20

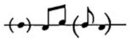
Cell 5 is thus dominated by two formulaic complexes, one consisting of falling configurations, the other of cadential formulae (RRLLL and its breakage variants in ex. 19, FFLLL, and ex. 17). Between them they account for all but 18 cycles.

As a result of the identification of formulae that encroach in both directions onto cell 4 the remaining material to be considered in this area is somewhat diminished. But it is still rather variable. Considering time units 9-10 and 11-12 separately it might be expected that rising and falling steps would be frequently encountered, as in cell 3, but in the context of cell 4 as an entity of four time unit it is only in specific combinations that they become potentially formulaic. Where there has been no encroachment the two most common configurations, occurring four and three times respectively, are RFF and FFR, while if encroachment leaves only time units 9-10 unaccounted for we frequently encounter, predictably, rising and falling steps (10 and 13 occurrences respectively). In the first case, however, formulaicity is suggested by the lack of variation in what follows:



Example 21

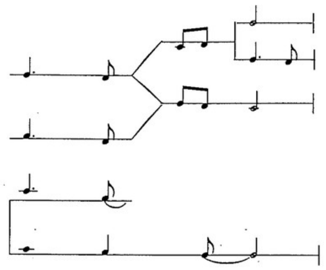
and we may identify here an encroached-upon variant of RFF. Also frequently encountered, indeed marginally more so, as it occurs 14 times, is a rising third which, being invariably preceded by the pitch above and followed by a stepwise descent, can also be regarded as formulaic:



Example 22

Finally, it is worth noting that the degree of encroachment onto cell 4 can be such as to squeeze it out of existence as a separate entity. Thus where cell 3 initiates the configurations

LLF and LLF3 these may combine with the cadence formulae RRLLL, FFLLL and ex. 17, in the first two cases abutting and in the third overlapping:



Example 23

Considering as standard the configurations for cells 1 and 2 displayed in table 9; those for cell 3 displayed in ex. 13, and the various configurations noted as formulaic in cells 4 and 5, the proportion of each of the seven pieces thus accounted for is as follows:

piece	total time units	time units accounted for	percentage of total
44	304	279	91.8
45	352	304	86.4
46	224	198	88.4
47	352	307	87.2
48	320	247	77.2
49	320	272	85
50	128	112	87.5
	2000	1719	85.8

Table 11

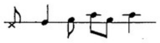
48 thus looks slightly atypical, containing rather more of what at this stage appears to be non-standard material, and this leads us to the next step, consideration of whether the formulae thus identified account for a similar proportion of the remainder of the berefşan repertoire, and whether it is possible to identify these as formulaic material hitherto passed over or, indeed, wholly absent from 44-50.

The remaining pieces need to be divided into two groups, the reason being that some are

not notated in the vezn-i kebir code of 44-50. Both the other codes permit greater detail to be recorded, particularly with regard to dotted rhythms, and the pieces notated in them, which form the second group, need therefore to be considered separately. The first group, which permits a direct comparison of like with like, consists of the berefşan pieces 99, 148, 167 and 227; the relevant segments of the darbeyn pieces 151, 154 and 215 and of the zencir pieces 108, 109, 110, 111, 173 and 188; and 73 H3. With a total of 128 cycles this group is virtually identical in size with pieces 44-50, although it should be noted that in the darbeyn and zencir pieces, where the berefşan cycle is always section final, there is a higher than average incidence of repetition and a consequent possibility of exaggeratedly high or low percentages.

Rather than give a comparative statistical table for this group and then attempt to analyse the differences, we may begin with a general point of procedure from which may be derived appropriate adjustments to the repertoire of formulae. The obvious indication that a particular configuration is formulaic in a given cell is that it occurs there with sufficient frequency (even if, as has been recognized, any definition of what is sufficient must be arbitrary). Accordingly, it may be argued that RF, which occurs 9 times in cell 1, but not in cell 2, is one of the initial formulae in berefşan. However, if an instance of it were to appear in cell 2, it would be difficult to maintain that it would not have been perceived as the same formula, even if, conceivably, in an unusual position. From this it follows that to the first layer of formulae identified *in situ* we may add further material according to the general principle that what is quite clearly a formula in one position will not cease to be formulaic when located elsewhere, which logically implies anywhere, not just in another cell in the same cycle but also in another cycle. (Consequently, when going on to the following cycles it will not be necessary to proceed at quite the same slow pace: it will be less a question of identifying new formulae than of observing which known formulae occur where and with what frequency, the formulaic profile of each cycle thus being characterized to a considerable extent by variations of incidence within a common stock.) In the previous examination of pieces 44-50 attention was draw primarily to configurations occurring with sufficient frequency to warrant being singled out, but in the case, say, of the less common descending scale fillers noted in cell 5 (ex. 19), the fact that they are standard gambits found elsewhere in the repertoire can be called upon to reinforce the claim that they are formulaic. Other such cases could now be brought to the fore, but with the proviso that what is important is less to note their presence than to see whether they are characteristically associated with one cell rather than another and whether they adopt a particular local rhythmic configuration, that is, to examine how they are integrated into the particular structure of berefşan.

Three in particular may be considered. The first appears most frequently in the rhythmic shape given in ex. 24, but the size of the initial rising interval is variable, being most frequently within the third to fifth range, although larger intervals are also possible, a sixth, for example, appearing in 99. This formula occurs, exactly as defined, six times in all, on five occasions aligned with time units 9-16 and on the sixth with time units 1-8, and the exception, in 99 H2 1, is obviously deliberate, as the same formula is immediately repeated

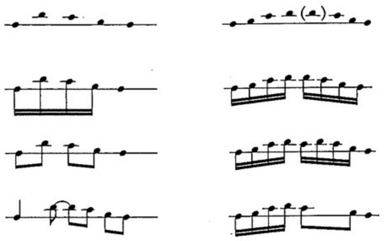


The cross note-head indicates unspecified pitch, but placing it lower that the next note is meant to convey that the initial interval must always be a rising one.

Example 24

in time units 9-16, thereby playing off melodic/rhythmic identity against the different stress implications of the percussion pattern in each half of the cycle.[43]

The other two, each of which appears in a variety of guises, both involve an ascending and descending fourth (so it would be possible to regard them as branches of a single formulaic family). In outline and with their several realizations, they are given in ex. 25. They occur in 167, 173 and 215 and also in most of the first set examined. Of the total of 14



Example 25

instances of the first, gapped contour, eight cover time units 9-13 and two time units 12-13: it is thus clear that cell 4 is the favourite location for this type. It may also be noted that seven of the 14 begin on d (the most common pitch position for this formula in the repertoire as a whole), and four on A.[44] The second type is concentrated in just two pieces, 167 and 215.

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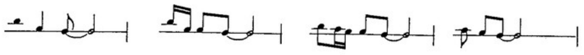
[43] The same melodic contour can be found, incidentally, at other points in a cycle as, for example, in 45 H1 2, 48 H1 2 and H3 2, in each case covering time units 3-10, but with a variation in the rhythm towards the end, so that in the light of the general rhythmic stability of this formula it is preferable to analyse this material in terms of potential concatenations of other shorter formulae.

[44] One would expect modal structure to be a major factor here, but three of the instances on *A* are in nigriz, which has finalis *G*.

Again, it is in cell 4 that six of its eight occurrences are located, thus suggesting, if not necessarily a generic or derivational relationship between the two types, at least a functional equivalence with regard to compositional procedures in the specific context of berefşan.[45]

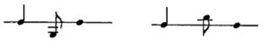
As might be expected from the cadential material displayed in the analysis of mode, we find in cell 5 (plus that part of cell 4 on to which final formulae encroach) that a number of variants need to be taken on board for the cadence formula in which the finalis is reached on time unit 12:



Example 26

and the evidence of the pieces under consideration also suggests that to the other cadence formulae RRLLL and FFLLL should be added FRLLL: although concentrated in only four pieces, this occurs 23 times in all.

A further extension of the range of formulae concerns the phenomenon of breakage. The pieces in this group provide confirmation that it is not an absolute requirement of the breakage formula (ex. 19) for the initial pitch of the following cycle to be the same as that of time units 13-14, and they also show that breakage may appear in cells 1 and 2, where it appears in two complementary forms, one an inversion of the other:



Example 27

But above all, scrutiny of the material in cells 1 and 2 results in the need to reconsider the melodic potential or variability of, precisely, the rhythmic articulation of ex. 27. This was first confined to the straitjacket of a single pitch step in either direction (LR and LF), although instances of other intervals (not at the time classified as formulaic) were noted in ex. 12. Considered collectively, however, these are by no means uncommon, totalling, indeed, no fewer than 31 occurrences in all the pieces so far examined, so that (the breakage formula apart) it is possible to establish the set of variants displayed in ex. 28, the conventional nature of which also extends in most cases to an apparent limitations on the possible range of preceding and, especially, following pitches.

Lastly, it may be noted in relation to cell 4 that if encroachment leaves only time units 11-12 unaccounted for, the falling third (followed by a rising second) previously encountered only in 47 and 48 is also attested in this slot in 110, 151 and 154, and may consequently be regarded as formulaic too.

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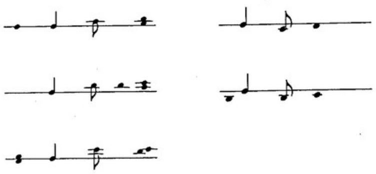
[45] The remaining two instances, interestingly, are sequentially juxtaposed in time units 1-4 and 5-8 of the same cycle (167 H3b 1).



Example 28

With the addition of this extra material to the formulaic stock, the proportion of the original block of pieces (44-50) thereby accounted for rises to give a global average of:

total time units	time units accounted for	percentage of total
2000	1796	89.8

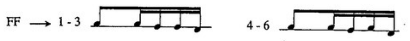
although it may be noted that at 80% 48 still lags a little way behind.

With regard to the remaining pieces, table 12 gives the comparable figures for the first group. If we conclude that all those with a reading of over 80% are accounted for by the formulae so far identified sufficiently well to be assigned to a single block, we are left in the original set with only 48 as a possibly marginal case, and in the other group with 110, 188 and, especially, 215 as pieces that in varying degrees fail to fit. Why this should be so is readily apparent: in nearly every case we encounter a significantly higher proportion of subdivided time units, and since in the formulae subdivided time units are few, these pieces must contain either a greater amount of non-formulaic material, or formulaic material that has not yet been identified as such, or both.

piece	total time units	time units accounted for	percentage of total
99	240	193	80.4
148	320	309	96.6
167	240	194	80.8
227	256	225	87.9
151	160	130	81.2
154	112	102	91.1
215	160	105	65.6
108	80	78	97.5
109	64	56	87.5
110	80	59	73.7
111	48	44	91.7
173	48	46	95.8
188	96	75	78.1
73	144	134	91.7
	2048	1616	78.9

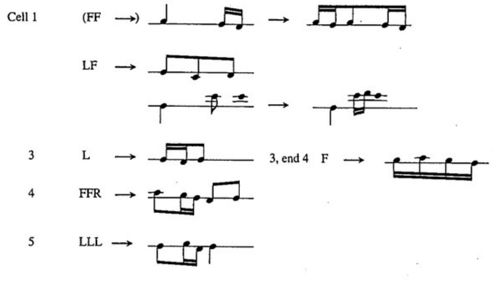
Table 12

In some cases it is easy to identify a particular segment with subdivided time units as a further version of a familiar formula. In 188, for example, H1 5 and M 5 have identical melodic lines throughout, but in time units 1-3 the former gives a different rhythmic articulation, with subdivided time units, to what in the latter has already been identified as the formula FF; and as yet another variant it would be reasonable to cite time units 4-6 in the same two cycles:[46]



Example 29

Although the confirmation provided here by such twin representations is not available in other cases, there can be little doubt that the same technique of subdivision involving the addition of adjacent pitches was widely applied, and the following may also legitimately be recognized as variants of familiar formulae, occurring for the most part in the positions indicated:



Example 30

If all the variants so identified are counted in the assessment of the four pieces with previously low percentages the gap narrows as follows:

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[46] This form also occurs in 215.

piece	total time units	time units accounted for	percentage of total	(previous)
48	320	268	83.7	(80)
110	80	68	85	(73.7)
188	96	93	96.9	(78.1)
215	160	129	80.6	(65.6)

Table 13

and on this basis it could be claimed that there is no fundamental difference between them and the other pieces so far considered. Accordingly, all would form part of the same stylistically coherent block.

But however neat, it must be conceded that such a conclusion is glib and unsatisfactory. Quite apart from its appeal to a vague and wholly undefined notion of style, it fails to account for the fact that the most recent batch of variants should be concentrated in so few pieces, in particular in 48 and 215. This raises a number of questions that cannot be discussed here, but may at least be mentioned. How, for example, are the different rhythmic articulations of the same melodic line to be interpreted? Do they belong, always allowing that it is legitimate to separate the two, to the domain of composition or that of performance? Or, to attack the same problem from a different direction, do Cantemir's notations always attempt the same level of specificity? As a working hypothesis it must be assumed that within the same code, broadly speaking, they do; but from this it follows that the distribution of the subdivided variants is not random and does actually mark off the pieces in which they are concentrated as in some way distinct.

One way of quantifying such differences is through the incidence of pitch changes: the more rhythmically subdivided time units there are, the greater the number of pitch changes per cycle is likely to be. Taking at random, for comparison with 48 and 215, two pieces from the initial set, 45 and 50, we have:

45	12.5
50	11.4
48	14.4
215	17.2

Elsewhere such differences may be seen to function as a diachronic index, in the first place in relation to earlier and later versions of the same piece, and then in relation to norms observable in particular segments of the repertoire at different periods. The suggestion would be, accordingly, that of the above four 215 is likely to be the most recent composition, with 48 intermediate between it and the two earlier pieces. This topic will be reverted to in 4.3.1.1, so that here mention need only be made of the implications of this reading, which are that for melodic density to be relevant as a diagnostic tool to Cantemir's collection considered in isolation it would have to be accepted in principle that certain features associated with different compositional periods (and here the concept of style might more legitimately be invoked) proved resistant to the levelling effects of oral transmission, and/or that a fairly radical change of compositional style was being introduced and was recorded by him before the rest of the repertoire had been adjusted in the direction of the new norms.

It is from discussion of such matters that it might be possible to disengage criteria which could contribute to a more objective assessment of style groupings, dating and attribution. Should we, for example, place any confidence in the attribution of both 227 and, to approach at last the final group of pieces, 279, to Cantemir himself? But rather than anticipate the outcome of such discussion we may point here to one aspect of 227 that provides a further bridge to the final group. The formulae so far identified account fully for no fewer than 12 of its 16 cycles, and partially for a further three; but there remains one cycle (H2c **1**) which escapes them completely. What is exceptional here is not the inclusion of anything untoward in the melodic contour, but the nature of its rhythmic organization: it consists almost entirely of a descending sequence that totally disregards the standard initial 3 + 3 cell structure and suggests, rather, 2 + 2 + 2.[47] Other instances have been noted of a variety of melodic patterns occurring within a given area that point to different possible internal divisions, but these have always been located in the following part of the cycle, so that what might be thought of as the occasional creation of contrastive tension does not undermine the normal high level of congruity between the metrical underlay and the rhythmic organization of the melody: the shift from a match with /d 0/ + /d t d d/ + /t 0 tk tk/ to, say, one with /d 0 d/ + /t d/ + /d t 0 tk tk/ still leaves two of the three cells with initial d and the third with initial t, while the repetitions initiated in cells 1 and 2 and continuing on beyond them[48] which generate an overall 3 + 3 + 3 + 3 + 4 division match a /d 0 t/ + /d 0 t/ + /d 0 d/ + /t d d/ + /t 0 tk tk/ perception of the percussion underlay. A melody which suggests an initial /d 0/ + /t d/ + /0 t/ division, on the other hand, not only runs counter to the obvious repetitive symmetry of the pattern of percussions but also has one cell in which the first time unit corresponds to 0, and could only be regarded as a deliberate flouting of norms. But in this last group such examples multiply: congruity is reduced and the rhythmic organization of the melody relates less readily to the cell structures observable elsewhere, both because of an increasing incidence of sequential repetitions which provide counter-symmetries and because of a tendency to introduce further subdivisions, with all their potential for a greater range of rhythmic patterns.

The final group consists of 279, 281, 304, 306, 319 and 339 (all in berefşan), and 289, 303 and 332 (in darbeyn);[49] there are no examples of zencir. As noted previously, one thing these pieces have in common which distinguishes them from the others is that they are written in the two other codes, vezn-i sagir and vezn-i asgar us-sagir, which allow the notation of further time-unit subdivisions and, in particular, of dotted rhythms. But beyond that there is little that ties them together, and we may begin by considering those pieces which most obviously resemble previous models: 303 and 306. The former deviates in just three minor respects, the first two of which, being no more than rhythmic subdivisions of a single pitch

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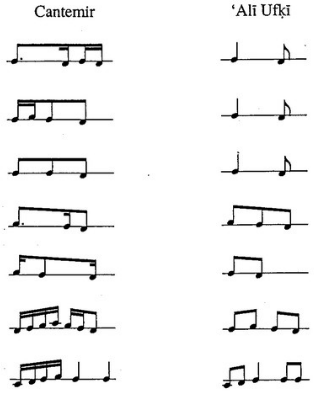
[47] One may compare also the first half of Mc **1**.

[48] Either repetition at the same pitch level as, for example, in 44 Mc **1**, or sequential repetition as, for example, in 45 H2a **2** and 111 H2 **5**.

[49] In Part i, 332 is labelled darbeyn-i cedid, but contains the full devr-i kebir and berefşan cycles, while 289, labelled darbeyn, uses a truncated form of each (on which apparent paradox see 4.3.2.1, n. 70). The latter is, therefore, not comparable with the remainder of the corpus and will be excluded from the following analysis.

(♩♪ in place of ♩. in cell 1 and ♩♩ in place of 𝅗𝅥 in cell 5), can be accepted immediately as unproblematic variations—and in general such subdivisions will henceforth be ignored. The third is the introduction in cell 4 of the rhythmic structure ♬, which reappears in 306, one of the berefşan pieces also notated by ʻAlī Ufḳī, reference to whose version provides equations, shown in ex. 31, not only for this configuration but also, usefully, for a number of others:



Example 31

In the light of this information 303 can be classified as formulaic in its entirety, while the percentage of 306 accounted for is 89.1%.[50] The question of why Cantemir should have chosen to represent pieces that so evidently conform to previously established norms with the vezn-i sagir code is readily answered: in the first index (p. 105) they are placed in the 'unknown' category, which means that they were not known to Cantemir when he was notating the first vezn-i kebir block, but were added later after he had opted for the greater rhythmic precision permitted by the other codes.

We may now proceed to examine the remaining pieces. Some idea of the extent to which these might or might not similarly conform may be captured from table 14, which correlates the percentage of formulaic material with the incidence of pitch changes per cycle. It includes, for comparison, an initial band consisting of the two pairs 48 and 215, and 303 and 306, and divides the other pieces into a further two bands according to code, the second consisting of just the one piece, 332, in vezn-i asgar as-sagir, which allows the most detail and with which one would expect to find associated the highest pitch-change readings. The calculation of the formulaic content takes account of a few further rhythmic variations that will be included in the final survey but need not be listed separately here.

piece	pitch changes per cycle	formulaic percentage of total
303	11	100
306	12.2	89.1
48	14.4	83.7
215	17.2	80.6
304	12.7	72.1
281	14.1	66.8
339	15.9	53.8
319	13.7	40.3
279	17.5	39.8
332	17.2	7.1

In the longer pieces the figure given is the average for the first 20 cycles.

Table 14

Within each of the first two bands there is, as expected, a broad correlation between the two columns: the greater the number of pitch changes, the lower the perceived formulaic content tends to be. But there is no simple progression from one code band to the other, and a particularly wide range of readings is presented by the pieces in vezn-i sagir. At one extreme there are 303 and 306, which, as we have seen, match perfectly the first batch of pieces examined and have both fewer pitch changes and markedly higher percentages of formulae than 48 and 215, the two in vezn-i kebir. But when we move to 304 and 281 the formula count dips significantly below 80%; and in 339, 319 and 279 it falls yet further, to the extent that it is evident that different compositional conventions are being called upon.

Given the fairly modest level of pitch changes in 304 its 72.1% formula count is unexpectedly low. But the reason is quite clear: despite the inclusion of no fewer than ten cycles that are formulaic throughout, there are four from which the formulae so far identified are wholly or almost wholly absent. They are characterized, rather, by the sequential repetition of a four time-unit phrase which appears in two closely related forms, both classifiable as variants of LFF, and the 3 + 3 + 2 cell division of the first half of the cycle is thereby again undermined. Such cross-cutting sequences are not new: it is the scale on which they are used here that is unprecedented, as is shown by the fact that the percentage for 304 would jump from 72.1% to 91.2% if account were taken of this phrase, and according to the principle, enunciated above, that what is clearly a formula in one position does not cease to be so when encountered elsewhere, it clearly ought to be deemed formulaic. The problem lies elsewhere, in a rhythmic articulation that implies accepting the possibility of an alternative (and counter-intuitive) 4 + 4 + 4 + 4 structure as standard in berefşan: what is at issue here is not so much simple percentages as recognizing that compositional innovation may involve using processes and materials that are conventional (i.e. formulaic) within the general repertoire in ways that run counter to the rhythmic norms of the corpus within a particular cycle.

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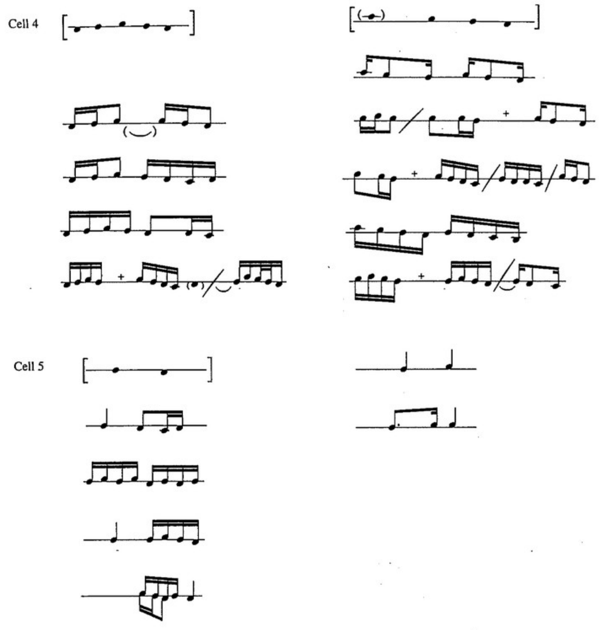
[50] It also takes account of a variant of the initial breakage formula with a fifth above: the size and disposition of the intervals in this formula may be expected to vary according to the mode.

In 281 and 319 the pitch-change count is somewhat higher than in 304, so that a further reduction in the perceived formulaic content is to be expected. But the extent of that reduction in 319 appears anomalous, for with a still fairly moderate number of pitch changes one would expect significantly more than 40.3% of this piece to be accounted for by the formulae so far specified. In fact, 319 illustrates with exemplary clarity a trend, also evident elsewhere, towards differing norms in the two halves of the cycle. Thus if we disaggregate the percentages for the two halves in all the pieces in the second band with low readings we obtain the following:

piece	first half	second half
339	83.7	23.9
281	82.6	51.1
319	75.6	7.5
279	39.6	40

In three of the four there is thus a very marked imbalance. The first half now conforms fairly well to the norms previously established, but different compositional habits are evidently taking hold in the second, which is now characterized by much greater fluidity: hardly any of the configurations found in cells 4 and 5 of any one piece are reproduced exactly in another. There are, nevertheless, certain general resemblances, so that it is possible to categorize a significant proportion of the material not in terms of simple formulae that are unvaried or exhibit just a narrow range of possible manifestations but—to draw a distinction that, it should be stressed, is essentially one of degree rather than kind—in terms of looser variations on an underlying contour (or archtypal formula) which may or may not be attested in its unelaborated form. Taking account of all the pieces in the vezn-i sagir block two such contours, displayed in ex. 32, may be mentioned for these two cells: in 4 a rising-falling arch and a stepwise descent, and in 5 a single-step descent and ascent (the latter being the only one to appear unelaborated). It is also worth noting that despite the overall increase in the number of pitch changes, the distinction between the two halves is underlined not only by what might be termed an increasing relaxation of formulaic rigidity in the last two cells, but also by an intervening contrast manifested in a trend towards avoidance of pitch change within cell 3. Thus out of a total of 66 cycles in 281, 319 and 339, in no fewer than 61 we encounter L, a far higher proportion that the 68 out of 125 cycles found in 44-50 (where the pitch-change average is significantly lower). Cell 3 evidently now functions increasingly as a caesura, a half-way point of closure marked melodically by a suspended cadence: the notes most frequently occupying this slot are those prominent within the mode apart from the finalis (which will often dominate cell 5).[51]



Example 32

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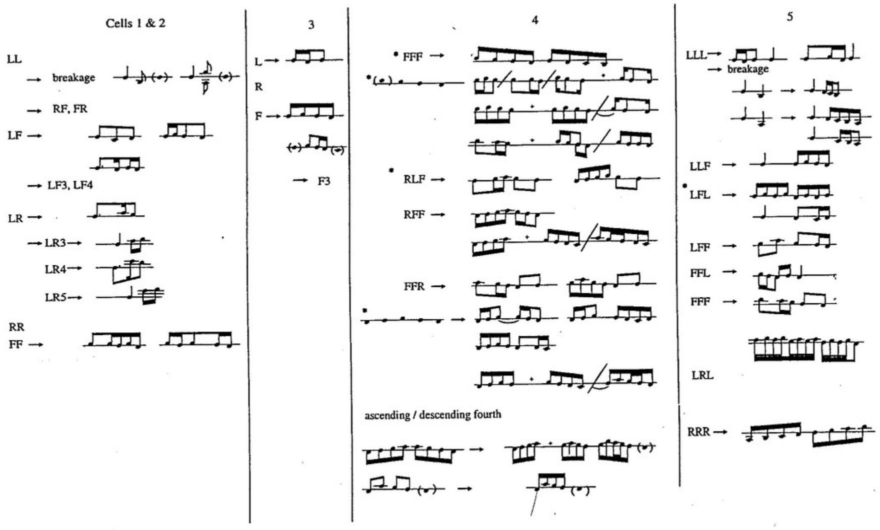
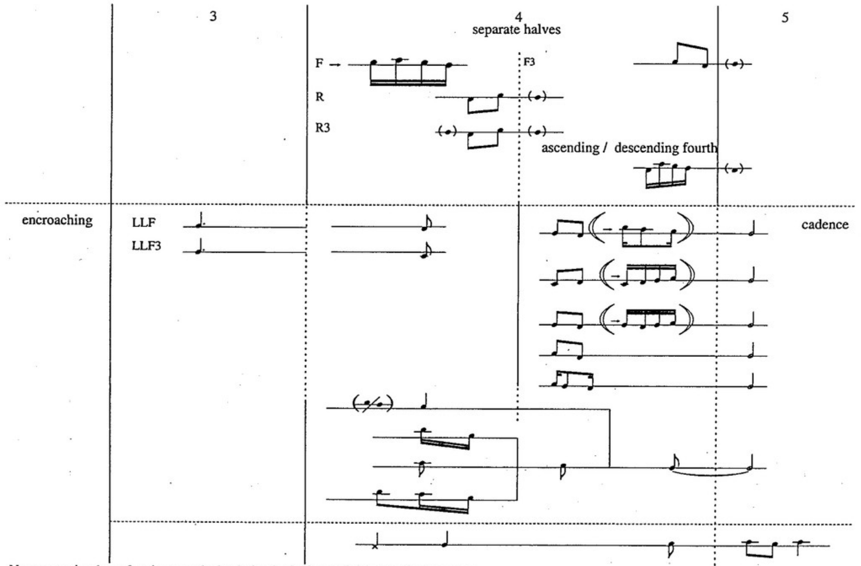
[51] Thus in 281 (bestenigar) we encounter mainly *f♯* and *d*, in 319 (maye) *B𝄳* (in this particular piece *B𝄳* is in fact also the finalis but should not be, according to Cantemir, who specifies *A* in this role), and in 339 (acem yegâhi) *d*.





No account is taken of variants marked only by rhythmic subdivision or displacement.
* Marks simplified abstractions, or presumed formulae that nowhere appear in exactly that form.

Example 33

This division is less frequently marked in 279, which also, as table 15 shows, avoids much of the known formulaic repertoire in cells 1 and 2. Together with 332, the piece notated in the asgar us-sagir code, 279 thus represents one more step away from the norms discerned in 44-50. After what could be interpreted as an initial nod in the direction of tradition in H1 1, it is marked not just by increasing surface proliferation (and a concomitant rise in the number of pitch changes) but also by greater rhythmic elasticity, the identity of cells 1 and 2, and sometimes also 3, being eroded by the occasional lack of an initial attack as pitches are sustained across the divide; by sequences of phrases four time units in length; and, more generally, by the increasing incidence of unfamiliar rhythmic articulations. Although there is a sufficient number of (sub)section-final cycles of more familiar shape to identify the piece as undoubtedly in berefşan, it is equally the case that in many others the 3 + 3 + (2 + 4) + 4 structure that dominates the repertoire as a whole is barely or not at all discernible.

The extent to which these various groupings constitute strata allowing diachronic conclusions to be drawn will be discussed in 4.3.1.1. Nevertheless, that 279 represents a later state of affairs than 44 is not in question, and the format of the survey of formulae and their variants given above in ex. 33 almost invites, or at least does not deter, a reading of developments from earlier to later forms. But that is not its purpose, and it is important to enter the caveat that the amount of surface detail revealed by the notation is affected by the level of precision that a given code permits, so that the notion of a straightforward linear development towards greater complexity would be simplistic: most of the variants grouped together must have co-existed.

It should also be stressed that ex. 33 represents a summary that makes no attempt to be comprehensive, and it omits, in particular, much of the material encountered in 279 and 332. Nor is it wholly rigorous. A degree of confusion, or at least hesitation, concerns the positioning of subordinate to head entries in cell 4, and a case could be made for reassigning some. Further, omission of variants marked by rhythmic displacement (e.g. ♩ ♪♪ for ♪ ♪ ♪) would, if taken to its logical conclusion, lead to a composite single entry for, e.g., LLF, LFL and FLL. But retention of these distinctions in what have been presumed to be the most basic potentially formulaic shapes is useful in showing that, in fact, several of those listed in table 8 occur only infrequently, if at all, in berefşan: thus rare or, indeed, absent from cells 1 and 2 are RL and FL, while not listed for cells 4 and 5 are a considerable number of the four-note configurations: the derivates of LLL (LRF, RFL, RLF, LFR, FRL, FLR); LLR and RLL; FLL; LRR, RRL and RLR; FLF; RRF, RFR, FRR and FRF. It remains to be seen whether this is a characteristic of the distribution of formulae in this particular cycle or whether these particular configurations are, contrary to expectations, generally uncommon.

Nevertheless, clearly displayed in ex. 33 is the greater variety encountered in the second half of the cycle (and particularly in cell 4). But the disparity between the two halves is not accounted for solely by the increasing differentiation noted in table 15 as characteristic of just a few pieces. Rather, we may regard these as atypical (and innovative) in degree rather than in kind, for they represent an intensification of a tendency that can be discerned in the berefşan repertoire as a whole towards a contrast whereby an initial relatively high level of formulaicity is succeeded by a relatively low one or, perhaps more accurately, one in which a

similar number of underlying contours generate a greater number of surface configurations. This tendency is by no means universal within the corpus: many cycles, as has been seen, use basic shapes throughout; but in cycles that do not this contrastive pattern is quite frequent, appearing in two slightly different forms: where there is no cadence we tend to find a differentiation between the two halves; while where there is, the return to more basic formulaic shapes occurs in cell 5. Thus in both cases we encounter an oscillation, even if slight, between levels of formulaic specificity: the only difference is in the point of return to the higher.

3.6.2 *devr-i kebir*

Having begun with berefşan it might be useful for comparative purposes to continue with a cycle that offers significant parallels: one that has a substantial repertoire, is similar in length, can likewise be analysed as a combination of duple and triple cells, and has, indeed, some pieces in common. In fact, devr-i kebir both combines with berefşan to form darbeyn and precedes it in zencir, and thus appears in the familiar 151, 154, 215, 289,[52] 303 and 332 (darbeyn); and 108-11, 173 and 188 (zencir). The pieces in which it appears alone are:

> 41, 51-6, 81, 95, 116-122, 133, 134, 152, 153, 157, 158, 174, 175, 190, 195, 201, 207, 220, 229, 231, 234, 290, 298, 302, 313, 321, 322, 348, 352, 353.

134 and 298 are the same piece,[53] so that the total is 40 (more than twice as many as in berefşan).

Because of its unusual rhythmic structure 348[54] will be considered later (as will 347, which is notated as if in devr-i kebir but is stated in both the heading and the index (p. 117) to be in evsat).[55] Of the 39 remaining pieces in devr-i kebir only 313 and 322 are notated in vezn-i sagir and 290, 298, 302 and 321 in vezn-i asgar us-sagir, so that the overwhelming majority fall into the vezn-i kebir category, and it is this main block of 33 pieces which, following the model of the berefşan section, will be examined first.

Even if subjective, it may be worth making the prefatory observation that, compared with the wide melodic variety encountered in berefşan, the devr-i kebir corpus seems to exhibit a rather higher degree of homogeneity. The impression holds despite its significantly greater size and the inevitable and expected differences between the pieces notated in vezn-i kebir and those in the other two codes; and if we focus on the vezn-i kebir majority confirmation that it is not mistaken is provided at one level by the narrower range of variation encountered in the number of pitch changes per cycle. Statistically, a slight narrowing by comparison with berefşan should be expected because of the reduction in the length of the cycle, on the basis of which one would also expect a parallel reduction in the overall total of pitch changes according to the ratio 8 : 7. But in general the readings for devr-i kebir confound predictions

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[52] As noted in relation to berefşan, 289 is unique in containing only a truncated form of its two constituent cycles.

[53] In what follows statistics will only be given for 134, the version notated in vezn-i kebir.

[54] See the discussion in Part i.

[55] This piece is also recorded by ʿAlī Ufḳī, as are 41, 52, 54-6, 81, 95, 118-20, 122, 158, 174, 201, 322; and the darbeyn pieces 151 and 154.

by being higher, thus making the narrower range all the more significant. The difference between the two is readily apparent from the comparison in table 15 which, restricting itself to pieces notated in vezn-i kebir, gives the number of pitch changes per cycle in those in darbeyn and (the relevant segment of those in) zencir, where devr-i kebir and berefşan are juxtaposed.

	berefşan	devr-i kebir
151	9.9	16.2
154	9	19
215	17.2	17.1
109	10	17
110	13.6	13.6
111	12	15.3
173	9.1	16
188	11	14.3

Table 15

It is true that, given the particular context, the degree of difference indicated here may be somewhat exaggerated, the figures for berefşan being depressed by virtue of the fact that it is always the section final cycle, so that they include several cases where there is a cadence in which no pitch change occurs in (at least) the final cell. But the contrast is indicative nonetheless: devr-i kebir seems to conduct slightly more melodic business per cycle.

When considered in relation to the percussion underlay:

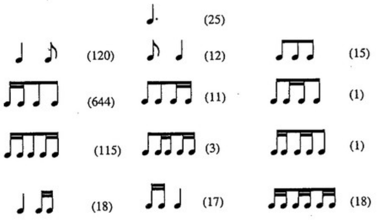
d d t d 0 t 0 t d d t 0 tk tk

the patterns of rhythmic organization in the melody suggest strongly that the dominant perception was of a segmentation (given in table 7) with four cells as against the five of berefşan: a symmetrical 3 + 4 + 3 + 4, the two halves being distinguished (and the integrity of the 14 time-unit structure thereby maintained) through the contrastive correlation of the onset of cells 1 and 2 with d and that of cells 3 and 4 with t. A possible initial correlation with t has already been noted in cell 5 of berefşan (which is identical with cell 4 of devr-i kebir—indeed, the pattern of the last seven time units is the same in both cycles).

If berefşan is predominantly analysable in terms of 3 + 3 + (2 + 4) + 4 and devr-i kebir in terms of 3 + 4 + 3 + 4, we might expect that some at least of the formulaic repertoire identified for (and common to) cells 1 and 2 in berefşan would reappear in cells 1 and 3 of devr-i kebir. Similarly, parallel to the differences between cells 4 and 5 in berefşan we might expect to encounter differences between cells 2 and 4 in devr-i kebir, with the latter frequently being taken up by cadential material akin to that found in cell 5 of berefşan and the former, possibly, echoing some of the configurations found in cell 4 of berefşan.

The first expectation is fulfilled to the extent that there are, indeed, strong similarities between cells 1 and 3 in devr-i kebir and, further, that some of the more readily identifiable

formulae have already been encountered in berefşan. But that there are also differences between the melodic norms of the two cycles has already been indicated by their divergent pitch-change averages, and in cells 1 and 3 of devr-i kebir we find that by far the most common rhythmic structure is one which only appears as an infrequent variant in berefşan: 𝅘𝅥𝅯 𝅘𝅥𝅯 ♪ ♪. The main block of 33 devr-i kebir pieces notated in the vezn-i kebir code contains a little over 600 cycles, of which the first 500[56] constitute a more than adequate sample, and a clear indication of the importance of this rhythmic structure may be gauged from the fact that it occupies no fewer than 644 of the 1000 instances of cells 1 and 3 that the sample yields. In berefşan it was possible to identify 𝅘𝅥𝅯 𝅘𝅥𝅯 ♪ ♪ as a variant of ♩ ♪, and although the latter is by no means infrequent in devr-i kebir, with 120 occurrences the roles are reversed and it is now very much the junior partner. But the two together leave a mere 24% of the total for all other structures and, as can be seen from the inventory in ex. 34, nearly half of this remainder is accounted for by just one, so that the general picture is of the overwhelming preponderance of three metrical patterns, with the remainder being more or less marginal.



Example 34

If we turn now to the most frequent melodic articulations of these rhythmic structures in cells 1 and 3, we find that the staple formulae, arbitrarily defined as those occurring more than 10 times in total and appearing in no fewer than 5 pieces, account for 72% of the 1000 instances. Grouping them according to the relative positions of the initial and final pitches, and representing the melodic direction within the rhythmically divided time units by lower case letters, they may be displayed as in ex. 35, which shows that some appear indifferently in either position, while others are strongly or almost exclusively related to just one. However, as has been noted, a shape clearly recognized as formulaic in one position would hardly cease to be perceived as such when moved elsewhere, especially when some of the

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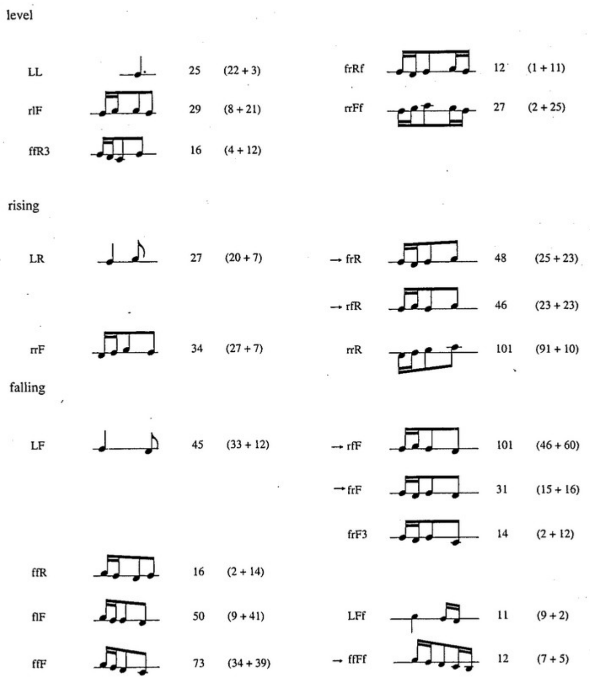
[56] That is, excluding 118 H2a and 133 H3a, both of which exhibit the phenomenon of half cycles, from 41 to 195 H3a.



The bracketed figures after the total number of occurrences for each give the breakdown for cells 1 and 3 respectively.

Example 35

occurrences in the less usual slot result from an evidently deliberate parallelism between the two halves of the cycle.[57] The 19 configurations listed in ex. 35 are far more numerous than the corresponding formulae in berefşan, but they still by no means exhaust the stock of formulaic material: for several there are variants that can readily be identified from context and, as will be seen below, there are others of lesser frequency that nevertheless occur in combination with material in cells 2 and 4 with sufficient regularity to made their formulaic character clear.

Overall, cell 3 is only marginally less formulaic than 1. The difference is so slight that there is no suggestion here of the distinction between levels of specificity noted in berefşan. Nor are similarities apparent elsewhere: comparison between the formulae assembled in ex. 35 and those identified in cells 1 and 2 of berefşan (table 9) shows that the two cycles present markedly different profiles in their respective three time-unit cells, with devr-i kebir exhibiting a far greater variety while at the same time avoiding some of the commoner articulations in berefşan, RF, FR, RR and FF. Nevertheless, while surface articulation is evidently a crucial feature giving each cycle its characteristic and contrastive physiognomy, certain underlying affinities can still be detected, for if L in berefşan is equated with fr or rf in devr-i kebir, the following correspondences emerge:

berefşan	devr-i kebir
LF	LF, rfF, frF
LR	LR, rfR, frR

and at 30% the amount of the total sample covered by the two sets of three in devr-i kebir is not significantly less than the equivalent 34% for the two corresponding articulations in berefşan.

For cell 2 in devr-i kebir a direct comparison with berefşan is more difficult to make. But if we take as the closest equivalent cells 4 and 5 in those cycles that are not (sub)section-final, it is again the case that there are considerable differences between them. It is true that most of the commoner berefşan articulations figure prominently in cell 2 of devr-i kebir, but its formulaic repertoire is much more varied, as ex. 36 makes clear, despite the fact that it contains only those articulations which, together with their variants, occur more than 10 times in the sample. They account for 65% of the total material.

In cell 4 we encounter, inevitably, a high proportion of cadence material. Here, as might be expected, contrasts diminish and a number of obvious similarities between the two cycles emerge. But before turning to these we may consider the 213 cycles which are neither (sub)section final nor contain cadential formulae. Here the most common configuration is FFF (31), which is also the most common in cell 2, but while a few others identified for cell 2 in ex. 36 are also frequent (FRR (7), RRR (8), LFF (5) and FLF (13)) the general pattern is rather different, for the remaining common formulae in cell 2 are rare or absent, while those given in ex. 37 come to the fore:

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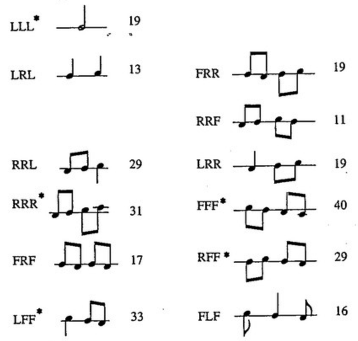
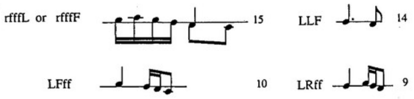
[57] As with the sequential use of the first rising figure in 41 H2a 1-2 and 133 H2b 1-2.



* denotes configurations also prominent in berefşan.

Example 36



Example 37

With their several variants (the greatest number of which cluster around FFF) these nine configurations account for 144 instances, 68% of the whole. Of the considerable variety of articulations that remain a number are examples of breakage; and just as it is difficult to accept that difference of position would affect categorization, the conclusion imposes itself that what can easily be identified as a typical breakage articulation[58] in the presence, say, of a following rising fourth or fifth, would equally be perceived as such in its absence, so that we may accordingly classify a further 13 cycles in all as exhibiting formulae of this type, thus bringing the total accounted for to 157, 74% of the whole.

Although relatively infrequent, breakage formulae containing a descending scale (cf. ex. 21) also make an appearance among the 204 (sub)section-final cycles.[59] In the vast majority

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[58] That is, including all those so identified in berefşan.

[59] In 56, 118 and 122. The type appearing in 95, 117 and 120 also occurs in non-final cycles in 117, 118 and 195. These have therefore been included among the 95 non-final cycles indistinguishable from final ones.

of cases, however, we encounter in these variations on a single theme, or rather on a single pitch, one that is either maintained throughout the final cell or is predominant in terms both of duration and of being initial and final. The incidence of the three specific articulations in question is as follows, the second figure being that for the 83 cycles that are not (sub)section-final yet contain the same cadence material (* signalling the inclusion of variants):

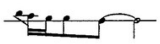
LLL	138	+	42
FRL	28		23*
Rf3rL	14		12

Among the remaining 24 (sub)section-final cycles breakage formulae appear in 10, while the one other articulation which occurs with sufficient frequency to be classified as a cadence formula is at the same time the only one to appear more frequently among the non-final cycles:

FFL	7	+	9

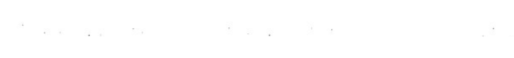
However, the uniformity of the cadence area is not quite as high as these figures suggest, for among the 138 instances of (sub)section final LLL there are 28 in which the initial attack is not on the first time unit of the final cell but on the one before, thus suggesting, as in berefşan, the possibility of alternative perceptions of structure, so that alongside the predominant /t d d/ + /t 0 tk tk/ division of the second half of the cycle there might be a /t d/ + /d t 0 tk tk/. In any event, it is worth noting that final LLLL is not confined just to a minority of cadence cycles, for in most cases of what has been defined as the cell 4 formula FLF the initial attack is again on the first time unit of a final block of five, so that it could be more accurately recorded as LFLF.

It is also the case that in all 28 instances of final LLLL a falling step precedes, and in all but one the final formula could be extended to:



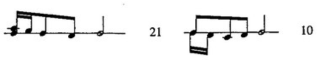
covering, therefore, the whole second half of the cycle.

Among the 110 remaining cycles ending LLL there is no such automatic collocation; nevertheless, in no fewer than 57 cases two falling steps precede, the most common configurations being:



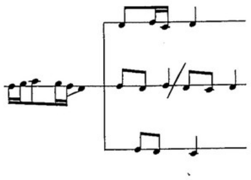
Example 38

Similarly, among the 40 cycles where the final note is approached from below there is a clear preference for the following configurations:



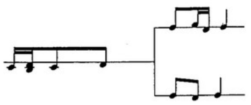
Example 39

With the other cadence formulae there is greater variety in cell 3, and some combinations owe their relatively high incidence to being repeated several times in one or two pieces. One may, however, note the following as a formulaic complex, with a total of 18 occurrences:



Example 40

Such complexes may also be identified among the 83 non-final cycles containing cadence material, but here, surprisingly, the most frequent structure is not the above but one that is not at all characteristic of (sub)section final cycles:

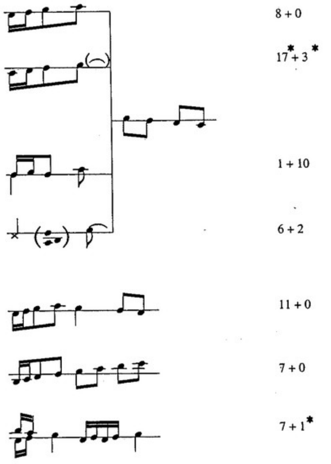


Example 41

This occurs 16 times in all, and it is interesting to observe that it virtually always has the same function, for in every instance but one it concludes the first cycle of a (sub)section (and in five cases the first cycle of the piece), cadencing on what is nearly always a modally prominent note and thereby evidently constituting a standard compositional device marking the closure of the first segment of the exposition of the basic structure of the mode.

As might be expected, similar complexes covering the whole second half of the cycle also occur outside the block containing cadence material with sufficient regularity to be adjudged formulaic, and such complexes appear, further, in the first half of the cycle. The most readily identifiable are displayed in ex. 42, where the bracketed numbers show their incidence in the

first and second halves respectively (although it should be noted that the figures are not directly comparable, as the first relates to the whole sample of 500 cycles, the latter to just 204):



Example 42

If account is also taken of breakage in the first half of the cycle[60] and, in addition, of the few instances of the rising-falling fourth configurations (displayed in ex. 25) that occur so frequently in berefşan,[61] the proportion of the sample so far identified as formulaic rises to more than 80%. The spread is also reasonably uniform although, inevitably, some pieces yield a higher average than others, the extreme case being 190, in which nothing remains unaccounted for.

But even if allowance is made for further variants of common formulae, some pieces still have a lower than average figure, whether overall (157 and 195) or in a particular area (118 H3d, e, 120M, 133M and 153M). However, the differences are not dramatic, and can sometimes be accounted for by the repetition of (apparently) non-formulaic material.[62] In general, as with the similar cases in berefşan, these pieces tend to exhibit a higher proportion of subdivided time units, and hence a greater variety of configurations, so that determining which are more or less likely to be formulaic is more difficult. Also common in those where a particular area appears atypical are sequences which cut across cell boundaries,[63] although without in any way disturbing the rhythmic norms of devr-i kebir.

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[60] e.g. 41 H1a 1, Ma 1 and 3, 95 H2 1. 158 H2c 1 provides an instance where the whole cycle consists of a breakage formula.

[61] In devr-i kebir these tend to occur in shorter note values in cell 2 (e.g. 174 Mb 3) and in longer note values covering a half cycle (e.g. 118, H1a 2, 175 Ma 1, 190 Ma 1, 2)

If such local variations are regarded as relatively insignificant it might be thought, given the size of the sample, that most of the formulaic range of devr-i kebir would have been covered in the above survey and, consequently, that comparable readings ought to be expected from the remaining material notated in the vezn-i kebir code. This consists of 201, 207, 220, 229, 231, 234, 352[64] and 353, and the relevant parts of 151, 154 and 215 (in darbeyn) and 108-11, 173 and 188 (in zencir)). But in the event the degree of conformity is rather uneven. The percentage of formulaic material is high in 201, 231; 154; 108, 110, 111 and 173, and these pieces may therefore be deemed to exhibit essentially the same compositional techniques as the sample. In most of the remainder it falls within the 65-75% band, but in three (353, 215 and 109) it dips to the 50-60% band and it is in these last pieces, especially, that we again encounter a higher proportion of subdivided time units and sequences which cut across cell boundaries. Some of the structures which occur here are presumably formulaic, but are not identifiable as such by frequency of occurrence alone: the greater possible variation in pitch organization permitted by configurations of from five to eight notes means that no single one is likely to stand out.

As expected, similar problems of identification occur in the pieces notated in the other two codes. Nevertheless, the evidence of 303 (in vezn-i sagir) points to a particular descending sequence being formulaic in nature,[65] and it is clear that both here and in the other two pieces in this code, 313 and 322, the formulaic content is high, some of the configurations making use of the extra rhythmic subdivisions that the code permits being readily interpretable as variants of material familiar from the first sample. There remain, in vezn-i asgar us-sagir, five pieces, all by Cantemir himself: 290, 302, 321 and 332, the last in darbeyn and, finally, 289, a darbeyn piece unique in using only a half of each cycle. In berefşan such pieces tended to exhibit a contrast between greater surface complexity overall and increased emphasis on an internal caesura, cell 3 often being occupied by a single modally important pitch providing a suspended cadence. Here there is also a predictable rise in the overall number of pitch changes per cycle, as may be seen from table 16, which gives the average over the first ten cycles in, respectively, three pieces from the first sample, three from those with a higher proportion of subdivided time units, the three in vezn-i sagir,[66] and three of the Cantemir pieces.

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[62] Particularly in 120, where non-recognized material in each of four different cells is repeated four times.

[63] 118 H3d and e; 153M.

[64] A fragment a mere two-and-a-half cycles in length which may be disregarded.

[65] Found, for example, in 109 H2 (with which compare 303 Mb and H2b).

[66] For 303 (in darbeyn) the average is for the eight devr-i kebir cycles the piece contains.

41	13.6
51	13.7
157	13.9
----	----
207	15.2
220	15.3
353	14.9
----	----
303	17.7
313	15.2
322	16.6
----	----
290	16.6
302	23.3
321	17

Table 16

Both vezn-i sagir and vezn-i asgar us-sagir codes thus show an absolute increase, although this is in part no more than a function of their potential to record greater surface detail. Rather more interesting is, 302 apart, the lack of a similar gap between them, relatable to the unequal distribution of melodic events in the Cantemir group, where more pitch changes per time unit occur in cells 1 and 3 than in 2 and 4. Taking the same first ten cycles in each, we have:

cells	1	2	3	4
290	1.8	0.9	2.1	0.3
302	2	1.7	1.8	1.5
321	1.4	1.1	1.7	0.8

Table 17

That cell 4 should have the lowest average in each piece is only to be expected: it is here that cadence notes of relatively long duration occur. But what is unusual, to take the extreme case of 290, is the fact that in no fewer than 14 of its 20 cycles the same pitch is maintained throughout, as if to emphasize the end of the cycle as a point of closure.[67] Likewise, as with cell 3 in berefşan, cell 2, which always has a lower average that those flanking it, also frequently provides a medial closure, with the difference, however, that this may also occur in the first two time units of the cell.[68] These pieces further resemble the vezn-i asgar us-sagir pieces in berefşaŋ in the use of sequences that cut across cell divisions; but there is no parallel to the tendency there observed to undermine them by the use of pitches sustained across the divide: in general, the integrity of the 3 + 4 + 3 + 4 structure is quite well maintained. Another, if minor, point of difference is the absence from the devr-i kebir repertoire as a whole of the common rising formula (ex. 24), the normal format of which runs counter to its standard rhythmic articulations.

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[67] The same general emphasis occurs in 302 (in 12 of the 14 cycles) and 321 (in 10 of the 14), but restricted to the last two time units of the cycle.

[68] This feature may also be observes in the darbeyn pieces. In 332 it occurs in the first two time units of five of the eight cycles, while in 289 (where devr-i kebir is restricted to half its normal length) the same pitch is sustained over the final two time units in nine of the 14 cycles.

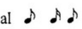
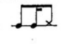
There remain the two problem pieces, 347 and 348. 347 will be considered below under evsat. 348 has already been discussed at length in Part i, so that here it remains only to add that the above analysis serves but to reinforce the perceived oddity of 348a. If 348c is regarded as problematic because too conjectural (postulating a rhythmic cycle not recognized by Cantemir) then 348b would still be left as a more reliable option, were it not for the unresolved difficulty of the half-cycles. One feature, the common cell-initial mordent, links this version closely to the notational norms of the Cantemir group (and therefore distances it from a putative original by Korkut), and in general it accords with the pieces in the vezn-i sagir and vezn-i asgar us-sagir codes in the number of pitch changes per (complete) cycle, 16.6, while a considerable portion of the piece also comes into reasonably clear focus when set against the known formulaic repertoire.

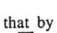
3.6.3 *evsat*

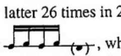
As pointed out above, 347 is notated as if in devr-i kebir (347a), but both heading and index assign it to evsat (hence the alternative transcription, 347b). There are just two other pieces unequivocally in this cycle with which it may be compared, 320 and 337, and the evidence they provide needs to be treated with some caution, for they presents a grand total of just 30 cycles that are not exact or close repetitions of others. Nevertheless, the similarities between them are sufficiently strong for it to be accepted that they are representative.[69]

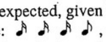
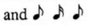
From its structure:

te ke te ke 0 d 0 t 0 d 0 d 0
te ke te ke 0 d 0 0 0 d 0 0 0

it is clear that evsat would have been perceived as consisting of two symmetrical halves. Each of these may be further analysed in terms of either four cells (2 + 3 + 4 + 4) or, if the first two are combined, three ((2 + 3) + 4 + 4). However, although the pattern of percussions certainly suggests that the first two would have been perceived as 2 + 3 (hence the imposition of this division upon the transcription), from the melody alone it is by no means clear that this should be the preferred interpretation, and on the basis of the fact that the symmetrical  appears three times in 320 as  a case could equally well be argued for 3 + 2.

Nevertheless, in both pieces the rhythmic values confirm unequivocally a division into symmetrical halves, and align themselves likewise with a large-scale 5 + 4 + 4 division in each half. Calling these cells 1a, 2a and 3a respectively in the first half, and 1b, 2b, 3b in the second, we find that by far the most frequent rhythmic articulation in 3b is (25 occurrences), with  accounting for the remaining five, while in 3a the roles are reversed, the two articulations appearing three and 23 times respectively.

In cell 2 the same two predominate, the former occurring 11 times in 2b, three in 2a, the latter 26 times in 2a, eight in 2b. Essentially a variant of the first, a further articulation in 2b is , which occurs seven times. With the second articulation melodic movement is predominantly stepwise (up or down).

In cell 1 there is rather more variation, as is only to be expected, given its greater length, but again there are just two articulations that predominate: , which occurs 20 times in 1a, 14 in 1b; and , which occurs eight times in 1a and six in 1b. Of the remaining ten instances of 1b, four are taken up by the main cadence of 337, in which the finalis is reached on the second time unit of the cell, time unit 15 of the cycle, with further attacks on time units 21 and 23, and the attack on the penultimate pitch (a third above) is on time unit 13, the one before 1b. The finalis thus occupies the last 12 time units of the cycle. This feature can be more than matched in 347, where in H3 a single pitch is sustained throughout the second half of each of the four cycles, but it would be quite uncharacteristic of pieces in devr-i kebir. Add to this the general conformity to the rhythmic norms noted for evsat in the segments of its cycles corresponding to cells 2 and 3 and it becomes clear that it is the notation that needs to be adjusted to fit the heading, and not vice versa, and that the correct version is 347b, thus giving three evsat pieces in all and a total, including now repeated material, as usual, of 63 cycles.

As expected, these exhibit certain patterns of melodic movement coincident with formulae identified elsewhere. Instances can be found, for example, of rising scales,[70] the rising and falling fourth,[71] and breakage.[72] Also to be noted are extended sequences involving complete or half cycles.[73] Within each half, cells 2 and 3 together are in many instances equatable with formulae previously noted in e.g. cells 2 and 4 of devr-i kebir (FFF being particularly common). Cell 1, on the other hand, is more difficult to characterize. Given its length a greater degree of variety was to be expected, but apart from a rising scale, endemic in 347 and occurring occasionally elsewhere, there are hardly any configurations appearing in more than one piece: the formulaicity of cell 1 seems to be confined to the domain of rhythmic articulation.

3.6.4 *devr-i revan*

There are eight pieces in this cycle:

102, 170-2, 216, 283, 328, 335.

The first five are notated in the vezn-i kebir code, the last three in vezn-i sagir. However, it has been assumed in Part i that the shift does not relate, as elsewhere, to a need or desire to

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[69] The total includes Mb 6, which repeats more than half of Mb 3, but excludes Mb 2, which is a virtually exact sequential repetition of Mb 1.

[70] 337 Mb 1, 347 H2a 1.
[71] 320 Ma 1 and 3, H3c 1, 337 H2b 1, H3b 1.
[72] 337 H2a 1-2, H3a 1 (and cf. Ma 1).
[73] 320 Mb 1-2 and 4-5, 337 Mb 3, H2c 1-2.

record more detail but rather makes explicit what had previously been disguised: the tempo differentiation between devr-i revan and its normally slower counterpart, devr-i kebir. If the assumption is correct, the consequence would be the lack of a difference in melodic density between the two groups sufficient to mark them off as in any way distinct one from the other; and that this is in fact so is suggested by table 18, which gives the average number of pitch changes per cycle:[74]

102	8.5
170	8.1
171	8.7
172	7.4
216	7.9
283	7.4
328	7.9
335	7.2

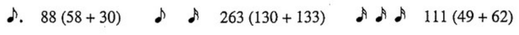
Table 18

All eight can thus be considered a single set for analytical purposes.

As already noted, this cycle of 14 time units has a distribution of percussions:

d 0 0 d 0 t 0 d 0 0 t 0 t 0

that points unequivocally to the same 3 + 4 + 3 + 4 internal cell division as devr-i kebir. There is nothing in the rhythmic articulation of the melodies in the corpus to suggest that this division is unjustified, and in parallel with devr-i kebir we may consider cells 1 and 3 as potentially equivalent and examine them together. The predominant rhythmic articulations they exhibit are as follows (with, again, the bracketed figures giving the breakdown for each cell):[75]



Example 43

These three articulations thus account for no fewer than 462 out of a total of 476 instances (97%), with the first appearing twice as frequently in cell 1 while the other two are distributed fairly equally between cells 1 and 3. None of the other five (and evidently marginal) configurations attested appear in more than two pieces.

In terms of melodic realization, the second of the main three configurations occasionally appears in the form of an upward leap of a fourth or a fifth, but in the great majority of cases it consists of a single pitch step up (LR: 107 instances) or down (LF: 114 instances), the

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[74] Taking in each piece the first 10 cycles as a sample, with the usual exclusion, in 172, of the subsections not divisible into complete cycles.

[75] The total number of occurrences relates to the 238 cycles remaining after the exclusion of 172 H1b, H2c and H3 teslim, which are not divisible into complete cycles.

two together thus accounting for 221 out of 263 instances (84%). The third, with three attacks, has much greater potential for variety, but again a mere three realizations predominate, although for two of them the less frequent occurrence of an inverted form may also be noted:

FF	18	RF	33	RF3	15
RR	5	FR	6		

The five together account for 69% of the total.

The formulaic content of cells 1 and 3 is thus extremely high, and in cell 3 there seems to be no appreciable difference in level between those cycles that are (sub)section final and those that are not. But an even higher level, as might be expected, is attained in cell 4 in (sub)section final cycles. There are 72 of these,[76] in no fewer than 69 of which cell 4 consists of a single pitch (LLL), and this is, again, by far the most frequent realization of cell 4 in the remaining 166 cycles, of which it accounts for 74. The remaining common configurations appear in a further 75 cycles, as follows, so that the whole set accounts for 91% of the corpus:

LLL	143	LFF	20	LFL	18
FLF	9	LRL	9	LRF	6
FRR	5	RRR	4	FFF	4

(It may be noted that despite its small size, two of the set, LRL and LRF, do not figure among the common configurations in either bereffşan or devr-i kebir, again suggestive of there being a distinct profile for each cycle.)

As expected, these same configurations figure prominently in cell 2, where they need to be augmented only by RFF, the inversion of FRR. The distribution, inevitably, is rather different:

LLL	17	LFF	24	LFL	62
FLF	15	LRL	32	LRF	21
FRR	6	RRR	4	FFF	13
RFF	5				

and although the proportion of material accounted for is, at 84%, slightly lower, it still reinforces the general picture of a corpus in which nearly everything has been created from a very small set of basic formulae. Accordingly, one would expect several standard collocations to occur, and a cursory examination is sufficient to establish that such is indeed the case. To take the most obvious example, given that cell 4 consists of a single pitch in 146 cycles (both (sub)section final and non-final) it is clear that there will be many instances of identity in cells 3 and 4, and in fact in almost half these cycles they are accounted for by the following five collocations (the numbers in brackets indicating the distribution in (sub)section final and non-final cycles respectively):

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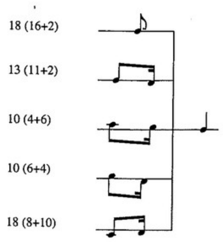
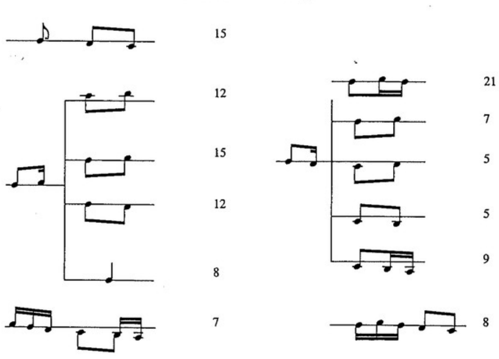
[76] Counting also the two cycles within subsections which are final in a repeated segment. These appear in 335 Mb and H2.



Example 44

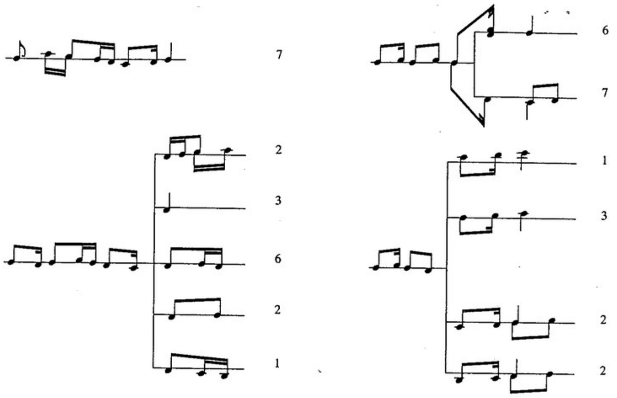
Some of these also appear in cells 1 and 2, and similar examples occur throughout the corpus, the most common of the other collocations being:



Example 45

One may note, further, a tendency for those that are predominantly rising to appear mainly in cells 1 and 2 and, even more strongly, for those that are predominantly falling to be concentrated in cells 3 and 4.

Nor are such strings confined to just pairs of cells. Thus a standard collocation in cells 1 and 2 may be followed by a narrow set of variants on a single pattern in cells 3 and 4, as shown in ex. 46, which presents the most common such concatenations:



Example 46

and of these the descending sequence is prolonged in several cases beyond the confines of a single cycle.[77] Such concatenations need not always be viewed as determined primarily by the choice of formula in cell 1: the first, for example, always occurs in (sub)section-final cycles, and could therefore be considered as a standard set of options associated with the preselected cadence in cell 4.

As the above evidence makes clear, the devr-i revan corpus is fairly homogenous.[78] But its uniformity is not always reinforced by the inclusion of formulaic procedures common elsewhere. It is true that there are several instances of breakage,[79] but sequences are relatively few, there is only one instance of an upward octave scale marking the onset of H2,[80] and trans-cycle formulae are either absent[81] or rare.[82]

[77] In 170 Ma 1-2, H2a 1-2; 171 Ma 1-2, 3-4, 5-6, 7-8.

[78] It should be noted, however, that there is repetition of material from 170 to 171.

[79] 171 H2c 2-3, H3b 1; 216 H2a 1,3; 283 H1d 1,3, H2a 1,3. Some of these take the form of fanfare-like extensions covering a whole cycle of more.

[80] 171, and even this is atypical, being sequentially enlarged.

[81] The ascending figure also noted as absent from devr-i kebir, and presumably for the same reason: rhythmic incompatibility.

[82] The ascending/descending fourth (102 H2b 1, 171 H1a 2, H2b 1,3).

3.6.5 *semai*

There are 33 pieces in semai, which is thus one of the most common cycles:

237-266, 272, 273 and 350.

In addition, there are sections in semai in 73 (değişme) and 130, while 268 is evenly divided between semai and semai-i lenk. All the semai material is notated in vezn-i kebir.

The pattern of percussions:

d t t d t 0

points fairly clearly to a 3 + 3 cell division, and on the basis of an initial sample of 10 pieces (240, 243, 246, 249, 252, 255, 258, 261, 264 and 272, with a total of 413 cycles) it is reasonable to conclude that for the most part the rhythmic inflections of the melody are consonant with such a division: where they do not coincide with the 3 + 3 structure of the percussion underlay they at least fail to conflict with it.

Taking 200 cycles from the sample (the first and last ten in each piece, but not counting those in which the onset of a cell is not marked by an attack), the dominant formulae in cell 1 are:

FR	36	RF	27
RR	33	FF	25
LL	35		

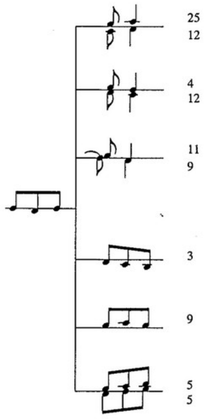
But the picture presented by cell 2 is very different. FR almost disappears (it occurs only three times) and LL is quite rare, while the most common formula of all is one that is virtually absent from cell 1, the general profile being:

RL	49	FL	36
FF	38	RR	14
RF	17		

To be correlated with the prominence of RL and FL is the fact that by far the most common rhythmic articulation of cell 2 in (sub)section-final cycles is ♪ ♩ (sometimes preceded in cell 1 by ♩. but more frequently by ♪ ♪ ♪). In both cells the dominant five formulae account for virtually the same proportion of the whole, 77 to 78%.

Ignoring the first two cells of the distinctly marginal frenkçin, the one other area within the repertoire of seventeenth-century cycles where two cells of three time units are juxtaposed, thus allowing the possibility of a direct comparison between the respective distribution of formulae, occurs at the beginning of berefşan. Although some degree of overlap is inevitable, it is clear that the two cells of semai exhibit a quite different set of preferences from the first two cells of berefşan: in the latter the most common structures (see table 9) include LF and LR, both absent here, while the stress placed in cell 2 in semai on the reverse rhythmic distribution (FL and RL) finds no equivalent in berefşan.[83] But rather more interesting than the simple constatation of this contrast between cycles is to note the internal differences in semai between its two cells and what they imply for compositional technique, in other words to look at the preferred formulaic combinations. For this purpose the considerably larger sample of the first 20 pieces (with a total of 814 cycles) has been examined.

As might be expected, much of the material is accounted for by a quite narrow range of combinations, so much so, indeed, that several should be regarded as compound or extended formulae covering a whole cycle. Thus for the first of the five formulae identified as the most common in cell 1 in the first sample[84] the following continuations account for 83% of all occurrences:



Example 47

Inversely, ex. 47 also shows how four of the five most frequent formulae in cell 2 (RL, FL, RF and RR) collocate with FR in cell 1.

For the second of the five formulae identified as the most common in cell 1, RF, 87% of all occurrences are accounted for by a quite similar set, displayed in ex. 48, which likewise shows how four of the five most frequent formulae in cell 2 (RL, FL, RF and FF) collocate with RF in cell 1 :

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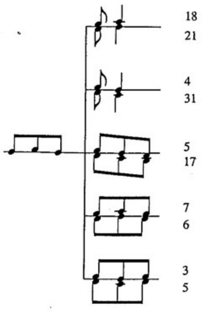
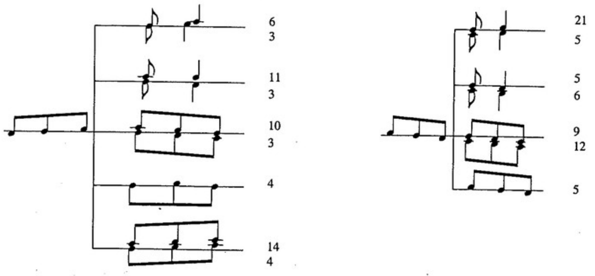
[83] A parallel contrast may also be made with first cell of devr-i revan.

[84] In the larger sample of the first 20 pieces, however, FR is slightly less frequent (with 114 occurrences) that RF (with 134).



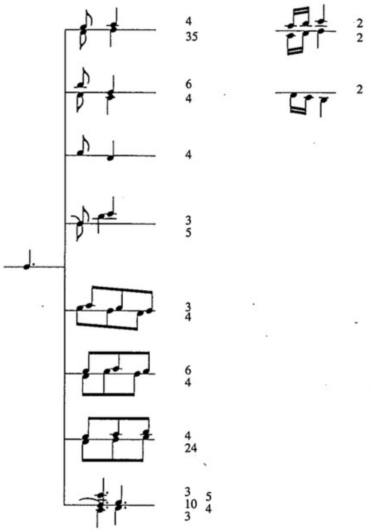
Example 48

Equally restricted are the continuations after RR and FF, those entered in ex. 49 accounting for 74% and 80% respectively of all occurrences:



Example 49

For the remaining cell 1 entry, LL, which is considerably more common in the larger sample than it was in the first, the picture is a little more complex. Nevertheless, in 80% of all cases LL still collocates with a very restricted number of rhythmic figures, as ex. 50 shows:

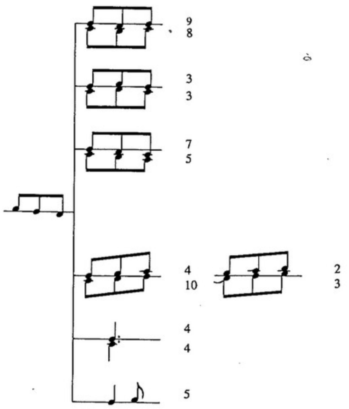


Example 50

and as yet another formulaic feature may be noted the fact that in the overwhelming majority of cases rhythmic subdivision is confined to the first time unit of a cell.

Further evidence that the whole cycle was often conceived as a melodic unit within which particular collocations were preferred is provided by a comparison of the formulae that most frequently follow FF when it occupies cell 1 (given above in ex. 49) with those that most frequently follow it when it occupies cell 2 (given below in ex. 51). As the latter account for 76% of all occurrences the suggestion is not that the transition to the next cycle tended to produce any marked lowering of predictability, in other words that it reduced the level of formulaicity in the linkage between cells, but rather that it constituted a different environment in which other preferences came to the fore.

The rather cautious formulation employed initially with regard to the way in which the rhythmic articulation of the melody accorded with the 3 + 3 implication of the percussion underlay was quite deliberate. There are in fact a large number of cycles where the melody,



Example 51

taken in isolation, could just as convincingly be articulated as 2 + 2 + 2, and several in which this (with its variants 4 + 2 and 2 + 4) is the obvious reading. A particularly striking instance occurs in the very first piece, 237, where H2 and H3 align themselves throughout with 3x2 rather than 2x3. But such passages are exceptional, rather more common being those, such as 239 H3b, that give the impression of a sustained use of hemiola by alternating the two. Nevertheless, the amount of material that points unequivocally towards 3x2 is still relatively small, totalling no more than 7% of the first 20 pieces, while the amount that points unequivocally towards 2x3 is more than twice as large.

The homogeneity of the semai repertoire suggested by the high level of material accounted for by the small number of moves contained in exs. 47-51 is reinforced by the quite narrow variations in melodic density that the majority of pieces exhibit. Taking the first ten cycles of the first twelve pieces, and excluding the highest and the lowest, the number of pitch changes per cycle in the remaining ten fall within the 3.7 to 5 range. There are one or two other pieces that go beyond it, but even the highest figure, the 5.7 of 258, is not occasioned by any departure from the norms observed hitherto. The piece that rather stands out as atypical is 265, and what distinguishes it is not an exceptionally high number of pitch changes per cycle but a much higher than average incidence of rhythmically divided time units, and while it is predominantly the first time unit of the cell that is affected, as elsewhere, there is also, and most unusually, a considerable number of such divisions in the other two time units.[85] (The version proposed for the fragmentary 350 exhibits similar characteristics, but this is too speculative to allow any conclusions to be drawn.)

Finally, mention may be made of breakage, the rising/falling fourth formula, and the rising formula, features that have found in several other cycles. As far as the first is concerned there are numerous instances of leaps of a fourth or fifth, but few that are followed by a return to the previous pitch,[86] and none of these is readily identifiable with the phenomenon of breakage as exhibited elsewhere, the major difference being that what would be classified there as a supplementary pitch occupies in semai a prominent node, so that the rhythmic emphasis is radically different. The rising/falling fourth is not wholly absent,[87] but in general comparable forms in semai tend either to stress the span of a third rather than a fourth or to present the typical rising/falling fourth contour but end one step above the point of departure. Finally, the rising formula is typically articulated elsewhere over eight time units, so that it would lie awkwardly over the 3 + 3 base of semai; but if a degree of rhythmic adjustment is allowed its presence can still be detected, even if faintly.[88]

3.6.6 *semai-i lenk*

There are five pieces in this cycle:

267, 269-71, 284

and it also has a half share of 268, the rest of which in semai. The corpus comprises a total 334 cycles, all notated in the vezn-i sagir code.

As has been seen in 3.2.1 there is some uncertainty about the percussion underlay. That adopted here:

d 0 d t 0 t 0 d t 0

points clearly to a 5 + 5 division, and also suggests that each half is likely to have had a symmetrical 2 + 3 division. But while the melodic material certainly supports this analysis for the second half, the evidence it provides for the first is much more inconclusive and, if anything, hints that 3 + 2 was a more likely division (thus giving a 3 + 2 + 2 + 3 mirror symmetry for the whole). However, rather than argue the relative merits of each possible division of the first half and divide up the material accordingly, in this cycle it is both feasible and preferable to consider each half as a block and, just as with devr-i revan, to look at the incidence of more extended concatenations. There are, in fact, a number of obvious similarities between the two, but even if much of the material identified in exs. 43 and 45 as characteristic of the onset of devr-i revan cycles also appears at the beginning of semai-i lenk cycles there are equally evident differences in ranking, as is clear from ex. 52:

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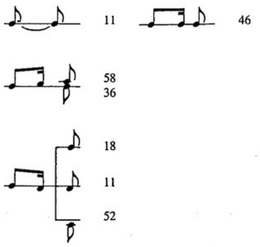
[85] Cf. the discussion (with an alternative transcription) of this piece by Feldman (op. cit., pp. 474-7), who regards it as one of those constituting 'a bridge between the 17th-century and later Turkish music.'

[86] Examples are: 238 Ma (5 and 7), 252 Ma, b, c, 256 H2d, 263 H2 and 273 H3b.

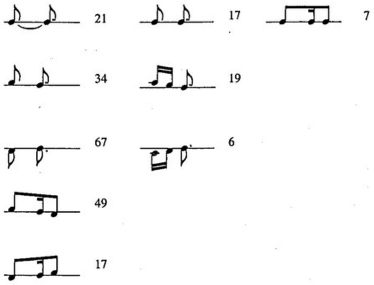
[87] Examples are 251 H2 2, 252 H1 3-4, 261 H3b 3-4, and cadentially in 253.

[88] In 249 H1 9-10 and Mb 12-13 and 252 Ma, b and c.



Example 52

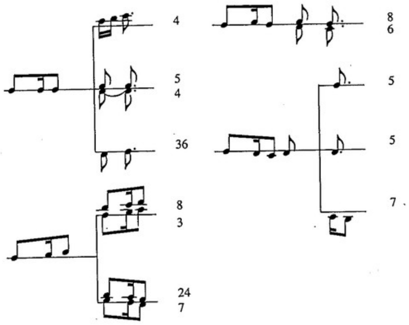
We thus have 69% of the corpus accounted for by a mere seven melodic shapes. Likewise in the second half of the cycle, where an equally small number of shapes accounts for 71% of the total:



Example 53

Given the pervasive use of these few formulae it is also to be expected that they would frequently co-occur to produce standard concatenations covering a whole cycle. That this is indeed so is demonstrated fairly clearly by ex. 54, which displays, in a way directly comparable to ex. 46, the distribution of the most frequently occurring formulae in the second

half of the cycle used in conjunction with the four most common manifestations of the first half:



Example 54

In all, these few combinations account for no less than 37% of the whole corpus. Also striking about them is the way in which particular ones tend to be concentrated in one or two pieces, thus heightening the impression of a deliberately repetitive emphasis on a restricted number of motifs. This is especially marked in 269 and 284, both of which use the same cadence figure (the third entry in ex. 54) not only at the end of (sub)sections but also internally to produce four-cycle blocks.

An inevitable result of such procedures is a high degree of regularity in rhythmic shape, and there are only two pieces in which one can point to areas of sustained (and presumably deliberate) contrast. Thus in 267 Mb the first half of each of the first five cycles adheres to a pattern introduced in H1 3: ♪ ♪ 𝅘𝅥𝅯, while H3b consists of 𝅘𝅥𝅯 𝅘𝅥𝅯 𝅘𝅥𝅯 ♪ 𝅘𝅥𝅯 ♪. 𝅘𝅥𝅯| 𝅘𝅥𝅯 ♪. 𝅘𝅥𝅯 𝅘𝅥𝅯 𝅘𝅥𝅯 ♪. | repeated twice; and in 268 H1b there is a repeated contrast of a cycle beginning ♪ ♪. with the next two beginning ♪. ♪ . But overall it is clear that the semai-i lenk corpus is remarkably homogeneous, as is also underlined by a comparison of the figures for melodic density. On the basis of a sample of 20 cycles from each piece[89] we find that the number of pitch changes per cycle varies in general between 4.3 (in 269) and 4.8 (in 271), the only piece standing outside this range being 267, which yields the slightly higher figure of 5.35.

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[89] The first ten and the last ten, except in 286, where the first 20 were chosen to avoid the doubtful area later.

Discussion of semai concluded with a brief review of the incidence of breakage, the rising/falling fourth formula, and the rising formula. If their role in semai was modest, in the semai-i lenk corpus it appears to be non-existent: none of them, it would appear, has a place among the standard melodic resources of this cycle.

3.6.7 *çenber*

The following are notated in this cycle:

76, 77, 96-98, 103, 104, 140, 181, 191-3, 297, 331, 333, 340, 351.

331 and 351 are two versions of the same piece, so that there are 16 in all. To them should be added the çenber material in the pieces in zencir and M in 73 (değişme). Also to be considered is 233, which has been assigned to çenber in Part i. 297, 331 and 333 are notated in the vezn-i asgar us-sagir code, while all the remainder, 351 included, are in the vezn-i kebir code.

As noted in 3.2.1 above, the percussion pattern of çenber is contained within Cantemir's definition of the zencir cycle, where it is allotted 24 time units rather than the 12 of the notated zencir repertoire. Preferring the latter value, we have:

d tk d d t 0 0 d t 0 tk tk

If it is not immediately clear what the most obvious cell division is, reference to the corpus shows that only rarely can a case be made for variant perceptions: there is a high degree of uniformity and, as most evidently in the very first cycle of 76, melodies are predominantly organized according to a 4 + 4 + 4 structure. Particularly clearly marked is cell 2: it is common for /t 0 0 d/ in the percussion underlay to correspond to LLF (or a variant thereof), with the melodic context making it unlikely that the pitch change associated with the final time unit could reasonably be interpreted as signalling the onset of the next cell.

If it is accepted, accordingly, that çenber contains no cells of three time units it might be anticipated that the greater amount of variation inevitable in cells of four would lead to a reduction in the overall amount of formulaic material, particularly given the high average level of surface complexity. It has already been noted that there tend to be more pitch changes per time unit in devr-i kebir than in berefşan, and in çenber (as might have been predicted from the conclusion about its generally slow tempo) there are at least as many as in devr-i kebir: the devr-i kebir pieces written in the vezn-i kebir code that are included in table 16 yield an overall average of 1.03 pitch changes per time unit, and the equivalent figure for the first ten cycles in each of the first six çenber pieces is 1.04. But in the light of the distribution of formulae previously encountered, especially in berefşan, one might also have expected that the least predictable area of the cycle, that with the greatest degree of variation, would be located in cell 2, and, as has been seen, such is not the case. In fact, taking as a sample the first 200 cycles[90] we find that the formulaic complex centred on LLF[91] accounts by itself for 35% of the total, while a further 30% is accounted for by a handful of familiar formulae:

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[90] Excluding the section in 73, so that we have 76-104 and all but the last four cycles of 140.

[91] The principal other members being LLF3, LLFf, LLFr, FRF and RFF.

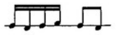
LFL	9	FLF	9	LFF	8
LLL	6	FRR	5	RRR	4

plus two further configurations hitherto of rare occurrence:

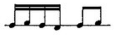
FFR	12	FFR3	8

Also identifiable as formulaic is a configuration best viewed as the onset of an extended cadence, while other formulae previously encountered (e.g. breakage) appear in a further 10%, thus bringing the total to 75%.

Within this sample the LLF complex accounts in addition for 28.5% of cell 1, although in comparison with cell 2 there are considerable differences in the distribution of its various individual manifestations. One of them:


frrfF

is not itself particularly frequent, but may be regarded along with its much more frequent inversion:


rffrR

as a typical initial compositional device in çenber: of their total of 14 occurrences nine are (sub)section initial. Overall some 77% of cell 1 can be readily identified as formulaic, the above complex again being supplemented, not unexpectedly, by material already encountered among the formulaic component of berefşan and devr-i kebir. Particularly common is a rising complex which accounts for a further 30.5% of the sample, its most common manifestation by far being RRR, which appears in 30 cycles.

Turning to cell 3, the sample of 200 cycles contains 71 that are (sub)section-final, and for these one would predict a high incidence of what have previously been identified as the most common cadential formulae. But in the event the çenber corpus exhibits markedly different preferences. In particular, there is a striking absence of the descending formula, extremely common in the other cycles ending with the same /d t 0 tk tk/ percussion pattern, in which the attack on the finalis occurs in the fifth time unit from the end (... FLLLL). In the corpus as a whole there is only one piece that comes close to this model,[92] while in the remainder the nearest equivalent is to place the attack in the third time unit from the end (FLL), and the resemblance is underlined in 77 and 140 by the use of a falling third in the preceding cell, as shown in ex. 55. This goes beyond the sample to consider the (sub)section-final cycles of the whole çenber corpus, and shows that nearly every member of the cadence family relating to FLL can be viewed as a variation on FFFLL:

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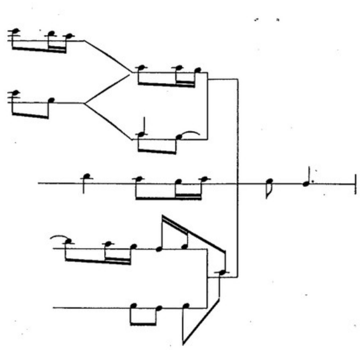
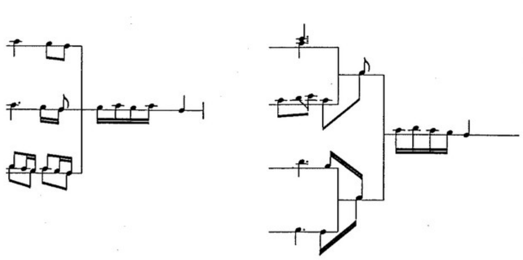
[92] 351 (by Cantemir), where there are two attacks on the final pitch, the first on time unit 8, the second on time unit 9, preceded in time unit 7 by the pitch above, thus yielding FLLLL.



Example 55

Broadly similar descending contours also characterize a further two common cadence families in which the attack on the finalis occurs in the penultimate time unit:



Example 56

Within the sample, all three occur with approximately equal frequency, but twice as common, with 20 occurrences, is the familiar FRL, to which may be added other instances of the whole

final cell consisting of or elaborating a single pitch.[93] When preceding this group, however, cell 2 is less predictable: it always ends with the pitch above or below that with which cell 3 begins, but that does not prevent a considerable number of configurations occurring, so that with this cadence there is no evident formulaic family spanning the two cells.

The above account for 79% of the (sub)section-final cycles, and descending contours also predominate among the remaining cadences, the most common of which are FFL and its variant flffL. FFL is, however, more characteristic of cell 3 in the 129 cycles that are not (sub)section-final. Here it occurs nine times, and of the more common cadences only those in ex. 56 appear at all frequently.[94] The other configurations that predominate are likewise descending:

LFL	10	LFF	4	FLF	6
FFF	9	FffF	5		

Adding to the above material already recognized as formulaic elsewhere it is again clear that for the most part cell 3 in the non-(sub)section-final cycles can readily be accounted for.

Overall, therefore, it is clear that the amount of formulaic material in çenber is of the same order as that previously encountered, but is not identical with that characteristic of either berefşan or devr-i kebir. Note has been made, in particular, of the prominence of LLF and FFR, and of a cell-initial turn (rff or frr). In addition, there are two features not previously encountered which may for the moment be identified as possibly characteristic of çenber. One consists of two variations on the general rising formula given in ex. 24, the first simply replacing the final FRL with LLL,[95] the second extending it to cover a whole cycle, retaining the original formula or a variant thereof in cells 1 and 3 and adding an expansion in cell 2.[96] The other is the inclusion of rising (especially) and descending four-note scales (rrr and fff) covering time units 1 and 2 or, more frequently, time units 3 and 4 of a given cell. Such scales are obviously not unique to çenber, but they do occur with much greater frequency than in the cycles hitherto examined,[97] and occasionally appear in conjunction with the cell-initial turn.

In general, the above account suggests a consistent level of dependence on formulaic material in all three cells, but from that it does not follow that levels will necessarily be consistent throughout the sample, and there are in fact marked variations, the extreme cases being 104, where almost everything is accounted for, and 98, where the tally is only 60%. But it would be erroneous to conclude from such a contrast that the two are characterized by radically different compositional norms: recognition in 98 of just one melodic configuration as a variant of a known formula[98] would push the total up to 80%, and despite the disparities suggested by an initial reading, there does seem to be a considerable degree of conformity through the sample as a whole.

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[93] The others being, apart from LLL (3), ffrrL (2) and rrffL (1).

[94] Also more common in non-final cycles is ffrrL, which occurs five times.

[95] As in 193 H1a 1. To this may be added a further variant with inversion of the first interval in 103 H1a 1 and 3 (cf. also 104 H1a 1).

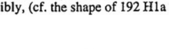
[96] As in 77 H1a 1.

[97] Excluding their appearance within the context of more extended scales and scalar sequences there are over 20 instances within the sample.

[98] Specifically, Lllrr as a variant of LLR.

The çenber material in 73 (değişme) and the zencir repertoire is clearly typological akin to the sample, as are five of the remaining six pieces in the vezn-i kebir code, 181, 191-3 and 340. Apart from the observation that given the rather high average number of subdivided time units contained in this group the formulaic repertoire needs to be stretched to accommodate one or two further such variants, they require no further comment.[99] The final piece, 351, as so often with Cantemir's own compositions, retains a considerable proportion of the formulaic language of the earlier repertoire, particularly in cells 2 and 3, but also in places diverges from it. It has already been noted, for example, that the particular rhythmic articulation of its (otherwise standard) cadence is not encountered elsewhere in the çenber corpus. But if, as a crude generalization, it may be said that the piece as a whole is fairly typical, the same could not be claimed for 233, which was tentatively assigned to çenber by a process of elimination, and although the original notation patently did not match the devr-i revan of the title, the conclusion arrived at in Part i that çenber provided 'a reasonably positive fit' and was the most likely alternative looks in retrospect more than a little shaky. Essentially, çenber was a candidate by default, and many of the features found to be particularly characteristic of it (the use of initial turns, four-note scales spread over two time units, the rhythmic articulation of cell 2, the preferred cadential formulae) are conspicuous by their absence: 233 needs to be reconsidered.

There remain 297, 331 and 333, the pieces notated in the vezn-i asgar us-sagir code. 331, as expected, shows certain small details, especially of rhythmic subdivision, that could not be represented in the alternative vezn-i kebir version, 351, but does not differ substantively from it. Considerably more surface detail is exhibited in the remaining two, but apart from, again, rhythmic subdivision, this concerns essentially melodic elaboration of outlines that conform quite closely to the prevailing norms of çenber. To be noted in 333 is the common elaboration:



and the compression of the initial turn and the rising four-note scale within the span of a single time unit, and similar features appear in 297, by Cantemir's teacher, Angeli. As with other pieces by this composer there is a high incidence of repetition, whether literal or sequential, but this does not, as elsewhere, undermine in any significant way the predominant patterns of rhythmic articulation within the cycle, so that neither piece contrasts to any significant degree with the general impression of homogeneity conveyed by the remainder of the çenber corpus.

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[99] Save to note that its lack of conformity to predominant rhythmic values suggests that the emendation proposed to 181 H2a 1 is unconvincing. More persuasive might be to assume that the original 3 (dotted quaver) for the duration of the first note is a slip for 4 (crotchet). One would then need to add, in the same place as before, either a quaver (possibly *a*) or, perhaps better, two semiquavers, either *e f♯* as before (still melodically acceptable) or, more plausibly, (cf. the shape of 192 H1a 2) *g f♯*.

3.6.8 *frenkçin*

In this, the other 12 time-unit cycle, only one piece is notated, 101, and conclusions are correspondingly difficult to draw, especially as the number of melodically differentiated cycles it contains is a mere 12. The distribution of percussions:

d d 0 d d 0 te ke te ke tk tk

points to a basic division into two strongly contrasted halves, with, as suggested by the transcription of 101, the most likely cell division being (3 + 3) + (4 + 2). The melody, however, conforms to this model only partially: indeed, in four of the 12 cycles what would seem to be the most obvious internal point of articulation, the onset of cell 3, is not marked by an attack, and it would be possible to make a case for an alternative 4 + 4 + 4 structure, particularly when considering the descending sequential repeat beginning at time unit 5 in H1a 1 and **3** and the prolongation of this pattern, suggestive of a 4 + 8 division, in H1a **4**. This last cycle is (sub)section final, and the cadence it employs, which recurs throughout, has the final attack in the familiar position of time unit 8, suggesting a possible 3 + 5 division of the second half of the cycle. This therefore differentiates it from çenber, and in general, even if viewed as a possible 4 + 4 + 4 structure, there is no point of resemblance between the two: in particular, there are no instances of the standard rhythmic articulations of cell 2 in çenber, and the frequent lack of an initial attack in cell 3 would also be atypical in çenber. Of the 12 cycles under consideration 10 are non-final, and among these there is only one in which the last two time units are distributed over two pitches, the cycle ending (LL)F3: in all the others there is an attack on time unit 11 and the cycle ends L. This fits the first cell division proposed, as does the rhythmic articulation of the breakage formula at the beginning of H2 **3**. But more general conclusions cannot be drawn. Nor, despite the occurrence of certain features (e.g. cadential or scalar) familiar elsewhere, would such slender evidence justify an attempt to define in relation to frenkçin the nature and distribution of specific melodic formulae.

3.6.9 *sofyan*

Cantemir notates only two pieces in this evidently rare cycle, 200 and 286, the former being qualified as çenberli sofyan. This could be thought to relate simply to the fact that, rather unusually, the number of four time-unit cycles in each (sub)section is a multiple of three, so that the whole piece could be mapped onto the 12 time-unit çenber cycle. Further, reference to the formulaic repertoire of çenber shows that this piece fits almost perfectly, and without the accompanying verbal information pointing in another direction the temptation to assign it to çenber would be irresistible.[100] The only point of difference appears to lie in the cadence which, unusually by çenber standards, does not contain an attack on the first time unit of the final cycle (equivalent to cell 3 in çenber), but even this is not sufficient to mark it off as belonging to another cycle, for exactly the same cadence appears in 140. If anything, we have here incontrovertible evidence for the 4 + 4 + 4 cell division of çenber, which in this case has facilitated the replacement of its normal rhythmic underlay by a repeating pattern of four time units (d 0 te ke). The similarities between 200 and the çenber corpus are further underlined by their absence from 286. Not that there is a lack of shared material: 286 is no less formulaic, but the distribution is not the same, and there are certain specifics that set it apart, notably the length of the first cadence (equivalent to a whole cycle of çenber) and the fact that in two separate contexts a single pitch is sustained over at least two sofyan cycles.[101]

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[100] It opens with the same melodic gestures as 77; the end of Mb closely resembles 77 Ma **4**; and the rhythmic and melodic patterning of H3a is virtually identical with that of 76 H3c **3** and **4** and 181 H3 1 and **3**.

In all likelihood, therefore, 286 is the only true representative of sofyan, and as with frenkçin generalizations about the identity and distribution of formulae cannot be made on the basis of a single piece. The most that can be said is that 286 exhibits a considerable degree of literal and sequential repetition of material spanning a single cycle, but it fails to supply evidence for associating with sofyan the consistent production of larger-scale melodic spans of two or four cycles: H2a and H3a are evidently binary, but although H1/Mc repeats a block of eight cycles it tacks on a cadence covering three, and the internal structure of H1/Ma and b is clearly ternary.

3.6.10 *fahte*

With fahte we move to the cycle that precedes çenber within zencir and follows it in 73 (değişme). The fahte corpus is one of the largest, consisting of:

> 22-4, 32, 33, 57-62, 123, 149, 166, 178, 211, 212, 226, 296, 311, 325, 330, 338 and 343

of which the last two are the same, thus giving a total of 23. 296 and 330 are notated in vezn-i sagir, 311, 325 and 338 in vezn-i asgar us-sagir and, as before, consideration of these pieces will be deferred until after that of the vezn-i kebir majority, of which we may take as a sample 22, 24, 33, 58, 60, 62, 149, 166, 178 and 212, which yield a total of 350 cycles.

As far as its pattern of percussions is concerned, fahte is the cycle most obviously related to çenber, being identical with it for the last 8 of its 10 time units:

çenber	d	tk	d	d	t	0	0	d	t	0	tk	tk
fahte			d	0	t	0	0	d	t	0	tk	tk

This would suggest, by analogy with the 4 + 4 + 4 cell division of çenber, a basic 6 + 4 structure, with the first block potentially divisible into 2 + 4, thus giving three cells in all.

A cursory glance at the sample is sufficient to confirm the validity of the basic 6 + 4 division. It is true that of the 87 (sub)section-final cycles 20 have a type of descending cadence, familiar from berefşan and devr-i kebir if not from çenber, in which the finalis is reached on time unit 6, thereby suggesting in this particular context the possibility of an alternative 5 + 5 perception of the cycle as a whole. But in 59 (sub)section-final cycles and a further 70 others (i.e. in 37% of the whole sample) we encounter a final cell clearly consisting of four time units all occupied by a single pitch (LLL, with an attack on time unit 7). Indeed, the preponderance of this formula at the end of the cycle would appear to be one of the most salient characteristics of fahte. Other familiar formulae occurring in this position are:

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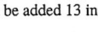
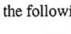
[101] 286 is one of the *'acemī/'acemler* pieces, and Feldman, who gives a transcription and analysis (op. cit., pp. 395-7), convincingly attributes its cadential peculiarities to its essentially non-Ottoman origin.

LFF	31	LFL	22	FFF	18
LLF	10	RRR	7	RRL	6

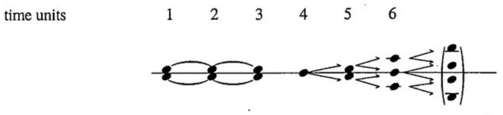
to which should be added 13 instances of breakage, and the following:

LRfff		7	LRff		6

Thus even disregarding variants of the above no less than 77% of the final cell is accounted for by a mere ten or eleven formulae.

In the preceding block of 6 time units there are several cycles where a 3 + 3 division could reasonably be proposed for the melodic contour if considered in isolation. However, such a division runs counter to the logic of the percussion underlay, for the onset of the second cell would correspond to /0/. But by the same logic, if the block is to be regarded as divisible at all then the /d 0 t 0 0 d/ distribution of percussions over the six time units points inexorably to 2 + 4 as the only possible choice. Many cycles could be analysed quite comfortably in terms of such a division, but there are no fewer than 73 (21% of the sample) in which there would be no attack corresponding to the onset of the second cell, and this seems an excessively high proportion when compared to the incidence of the same phenomenon elsewhere. Provisionally, therefore, this initial block of six time units ought to be regarded as a single entity, despite the descriptive and analytical problems caused by the vast increase in the number of possible configurations when compared with a unit of four.

We may begin by considering as a group the 73 cycles in which there is no attack on time unit 3. By far the most common configuration among them in time units 1-4, with 32 occurrences, is LLF. But in seeking to determine the extent to which the block as a whole can be recognized as formulaic progress is hampered by the fact that there are some ten different continuations, very few of which occur more than once or twice each. Accordingly, it would appear to be more productive to look at general processes rather than individual results. Thus in each of the two time units following LLF we find that either R or F is possible (in which case the following move to the first time unit of the final cell will also be R or F), and not only that 22 of the 32 are thereby accounted for but also the equivalent block in 11 of the 12 cycles with initial LLR, so that all 33 may be represented as:

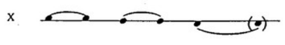


Example 57

In only one instance, LLFRR, which appears 11 times, can one identify a particular path as being preferred with sufficient frequency to justify considering it a standard articulation and hence a specific formula: otherwise it is more a case of noting the prevalence, yet again, of the most common strategy of all, that of moving to an adjacent pitch.

Less frequently, and then mostly in the context of (sub)section-final cycles, we encounter continuations where, rather, the same pitch is prolonged, and a further 13 cycles have an initial block which can be stated as:

time units 1 2 3 4 5 6

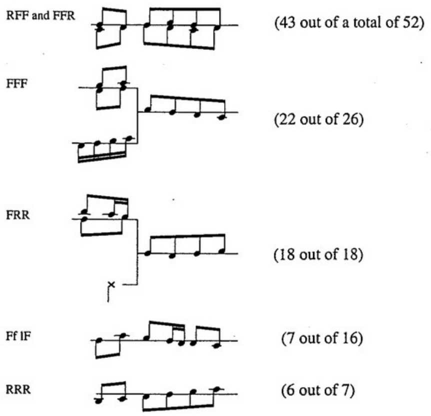


Example 58

Several of the remaining cycles in this group are also relatable to the above two types, and no further comment is required, so that we may proceed directly to consider the much larger remaining group where there is an attack in time unit 3 and therefore the possibility of a 2 + 4 division. In time units 3-6 by far the most common articulations, accounting for 45% of the 267 cycles in question, are:

RFF	29	FFF	26	FFR	23
FRR	18	FflF	16	RRR	8

and there are a number of standard moves in time units 1-2 which combine with them:



Example 59

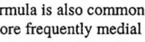
FflF is thus the least predictable, and it is interesting to note that while at one level of abstraction it may justifiably be related to FFF the two do not stand in free variation with each other, at least in this cycle: only two instances of FflF are preceded by moves associated with FFF, and it tends to occur predominantly in (sub)section-final cycles (exactly as in ex. 26).

These few articulations are sufficient to account for 36% of the 267 instances. But although this suggests that the level of formulaicity in this segment of fahte is likely to be comparable with that found in the other major cycles a more precise evaluation is rendered difficult by its exceptional length, and a simpler approach would be to analyse it in terms of two overlapping cells of four time units each. As this will allow alternative assignments, e.g. of 22 Mb 1 as either:

R FF (+(F)F)

or:

(R(F)+) F FF



the point will be not so much to assess the comparative incidence of this configuration or that but to check the extent to which the whole area is captured by, or escapes from, the repertoire of formulae already established. In general, there seems to be little that lies beyond them, and even in those pieces with the highest number of pitch changes per cycle, 58 and 61, the more complex melodic surface is produced by obviously formulaic means, chief among them being the frequent use of a rising four-note scale covering two time units (already noted as a common feature in çenber) followed by a descending figure. As expected, there are frequent sequential passages; and the rising-falling fourth formula is also common, the scalar form usually cycle initial, that with an initial rising leap more frequently medial or final. The rising formula, on the other hand, is rare, appearing only in 178, and then in a slightly truncated form.

An initial indication that the remaining pieces notated in the vezn-i kebir code are likely to exhibit similar characteristics is provided by table 19. This presents the average number of pitch changes per cycle (on the basis of the first 10 cycles in each piece), column 1 listing those already examined, column 2 the remaining pieces:

1		2	
212	5.9	32	6.7
178	7.1	23	6.8
22	7.2	59	7.3
33	7.6	226	7.5
149	8	123	7.7
24	8.8	57	9.1
60	9.2	61	9.3
62	10.5	211	9.9
58	11		
166	11.1		

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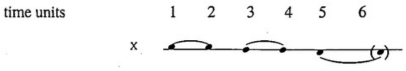

Example 58

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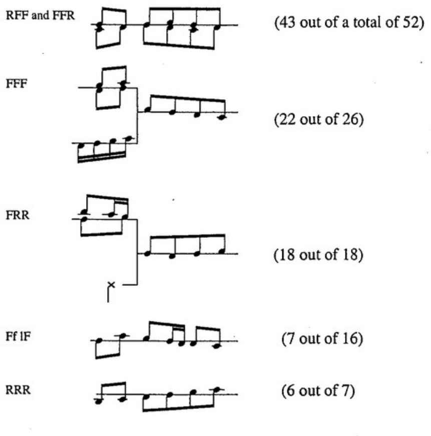

Example 59

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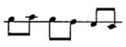

the point will be not so much to assess the comparative incidence of this configuration or that but to check the extent to which the whole area is captured by, or escapes from, the repertoire of formulae already established. In general, there seems to be little that lies beyond them, and even in those pieces with the highest number of pitch changes per cycle, 58 and 61, the more complex melodic surface is produced by obviously formulaic means, chief among them being the frequent use of a rising four-note scale covering two time units (already noted as a common feature in çenber) followed by a descending figure. As expected, there are frequent sequential passages; and the rising-falling fourth formula is also common, the scalar form usually cycle initial, that with an initial rising leap more frequently medial or final. The rising formula, on the other hand, is rare, appearing only in 178, and then in a slightly truncated form.

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60	9.2	61	9.3
62	10.5	211	9.9
58	11		
166	11.1		

Table 19

As this shows, the degree of variation is in fact narrower than before, all the pieces in column 2 falling within the range exhibited by column 1. Those pieces with the highest averages tend to contain more initial four-note rising scales (and also final four-note descending scales); and one may also note a number of initial turns reminiscent of çenber.[102] But the main impression is of a close general family resemblance with the sample pieces, shown most obviously by the fact that, as before, many cycles have a final cell consisting of LLL: indeed, the overall proportion rises from 37% to 52%, thus underlining the extent to which such end-stopped cycles are characteristic of fahte.

Within the remaining material we encounter a similar pattern. In the fahte section of 73 (değişme) seven of the nine cycles end in this way. The zencir pieces are somewhat less consistent, for while the proportion of cycles with final LLL is still high (46%), the distribution is uneven; but when we turn to the two pieces notated in vezn-i sagir we find, contrary to expectations, that the figure is even higher, at 63%;[103] and even in 311, 325 and 338, notated in vezn-i asgar us-sagir, where such cycles are mainly (sub)section final, the overall incidence is still 38%. As with some of the cycles previously discussed, these final three pieces exhibit a degree of surface complexity that prevents a simple quantification of formulaic content in terms of the familiar articulations associated with the vezn-i kebir corpus. Nevertheless, there can be little doubt that if these were rhythmically reduced *pro rata* (so that a cycle could now be examined in terms, say, of a series of ten equal cells of four quarter time units each) the level of correspondence would be found to be quite high: some similarities are in any case immediately apparent, such as the initial rising four-note scale that appears so frequently in 325; and comparison between 338 and 343, its vezn-i kebir counterpart, shows how some of the surface complexity could be reduced for purposes of analysis. But not all: 311 serves as a reminder that although the preference for end-stopping helps preserve the unity of the cycle, the disintegrative effects of rhythmic subdivision noted elsewhere can also be felt in fahte, being manifested particularly in the (yet again) sequential passages in Mb **1-2** and **4-5**, where the repeated four time-unit phrase cuts across the cycle boundary.

3.6.11 *düyek*

Preceding fahte to begin zencir is the most common cycle by far, düyek, which appears alone in the following pieces:

> 25-30, 34-40, 42-3, 69, 71, 74-5, 83-8, 90-1, 100, 105-7, 112, 115, 130-2, 135, 138-9, 141, 147, 163-5, 169, 176-7, 182-6, 189, 194, 196-7, 199, 204, 206, 210, 213-4, 223, 230, 235, 276, 282, 287, 291, 293, 295, 299-301, 305, 310, 314-5, 318, 326-7, 341

Excluding the problematic 282, which is identical with 218, defined as in the 16 time-unit cycle muhammes, the total is 81, so that nearly a quarter of the whole instrumental repertoire

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[102] e.g. 24 H1a **3**, 58 H1 **1**, 211 M **3**,**4**, 226 Mb **3**, Mc **3**.

[103] Although it might be argued that the prevalence of end-stopped cycles in 296, the longest and most complex of the külliyat pieces, is in part attributable to the need, within a brief exposition of each makam, to give due emphasis to medially as well as cadentially prominent notes.

is accounted for by this cycle alone. Notated in vezn-i sagir are 287, 291, 293, 295, 299, 300, 305, 310, 314-5, 326-7, and in vezn-i asgar us-sagir 301, with the remainder, as usual the vast majority, in vezn-i kebir. Of these the following 16 pieces, comprising a total of 1016 cycles, may be taken as a representative sample: 25, 29,[104] 36, 40, 71, 85, 90, 106, 130,[105] 138, 163, 176, 184, 196, 206 and 235.

The pattern of percussions in düyek:

d t 0 t d 0 t 0

points to a likely 4 + 4 cell division, which in turn would suggest that despite the great increase in the amount of material to be considered it might be accounted for by a relatively small number of formulae. The presumption of a 4 + 4 division is supported most obviously by the melodic characteristics of (sub)section-final cycles, of which the sample contains 136. These align themselves broadly with the cadence patterns of the other common cycles discussed above, at least to the extent that by far the most common formula used to end the cycle is LLL (which with 89 occurrences constitutes 65% of the sample), followed by its variant FRL (9 occurrences); and a further indication is the fact that the common descending cadence formula in which the attack on the finalis occurs in the fourth time unit before the last (yielding FLLLL) is much less important in this sample of düyek pieces than it is in other cycles, occurring only nine times, and it is consequently less easy than elsewhere to make a case for alternative perceptions of the basic structure of the cycle. But although it seems clear that the 4 + 4 cell structure must be regarded as the norm, the sample also contains 176 cycles where time unit 5 is not marked by an attack, so that the divide between the two constituent cells is elided, and this is a number sufficiently large to warrant such cycles being considered as a separate group.

There remain 840 cycles where there is no such elision, and these will be examined first. The preferred material of düyek may be deemed to consist in the first instance of those configurations which occur here at least 17 times (each one accounting therefore for a minimum of 2% of the sample). Accordingly, for cell 2 the basic formulaic stock includes 12 configurations involving, if any, only moves to an adjacent pitch. These are listed in table 20, which distinguishes (sub)section-final cycles (column 1) from others (column 2):

	1	2		1	2
LLL	89	100	LFL	1	65
FRL	9	44	FFF	4	49
RRR		43	RRL	1	41
LFF		40	LRL		32
FRF		28	FFL		27
FRR		24	RFF		19

Table 20

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[104] Omitted from the total count are H2a **3-5**, where the reading is uncertain.

[105] Here H3 switches to semai, and will therefore be disregarded.

They account for 73% of the material, and if we add to them the 22 occurrences of various manifestations of the breakage formula, and note the presence of variants and of several other configurations recognized as standard elsewhere, it becomes clear that the general level of formulaicity is comparable with that found in the other major cycles.

Similarly in cell 1. Here, if a parallel exclusion is made of the 77 cycles in which the onset of cell 1 is not marked by an attack, the comparable figures for configurations involving, if any, only moves to an adjacent pitch are:

LLL	100	RFF	98
RRR	80	LLR	65
LRL	45	RFR	39
LFL	30	FFF	29
RLF	22	LLF	21
FRR	20	FFR	18
RRL	17		

Table 21

These account for 62% of the sample, and if we add to them variants[106] and other known formulae, the figure again becomes comparable with that found in the other major cycles, and although it is clear that there is rather more diversity in cell 1 than in cell 2 the difference is not sufficiently marked to point, as in berefşan, to contrasting zones of greater and lesser formulaicity. That this is so is underlined by the equally formulaic nature of the 153 cycles where the onset of cell 1 is marked by an attack but not that of cell 2.[107] Here 70% of the material can be assigned to the four formulaic complexes displayed in ex. 60. In the first—which with 66 occurrences is by far the most common—the interval between time units 6 and 7 is preponderantly rising, most frequently a third or a fourth. The second is a familiar cadence formula. The third and fourth are sufficiently similar to be regarded as a single complex, but as presented the fourth may more clearly be seen as relatable to the general rising-falling fourth formula (ex. 25). This appears quite frequently in düyek, sometimes in the gapped form with an initial rising fourth, usually within a single cell, or, as here, in the filled-out scalar form spread over a whole cycle (or more), and in addition to the 25 occurrences of the complex given in ex. 60 a further 30 instances of different configurations occur elsewhere. (Also covering a whole cycle is the fairly common rising formula (ex. 24), which with variants occurs 19 times in the sample as a whole, although it is not evenly spread, being concentrated in a relatively small number of pieces.)

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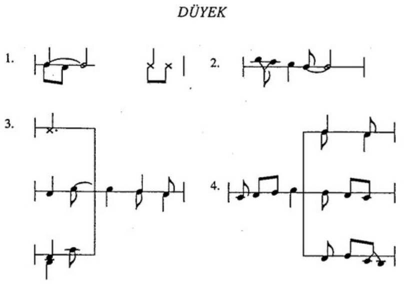
[106] Particularly common are variants of LLR (LLRx, where $x = 3$, 4 or 5) and RFF (R3FF).

[107] There are thus 23 cycles in which the onset of neither cell is marked by an attack. In relation to 100 (not part of the sample) Feldman has noted (op. cit., p. 398) that many cycles can be read as 3 + 3 + 2, and makes the astute observation that this (*'acemi*) piece may represent an Anatolian and Azerbayjani folk idiom not recognized by the Ottoman art-music tradition. But there do not seem to be any examples of this phenomenon in the sample: the cycles in which the second cell is not marked by an attack are too scattered to characterize any single piece, and even when they are quite concentrated, as in 71, where there are 25 such cycles, not more than 10 can be thought of in terms of 3 + 3 + 2. Moreover, one may note that the cycles in question in 100 do not employ the formulae listed in ex. 60.



Example 60

There remain to be considered the 77 cycles in which the onset of cell 1 is not marked by an attack. If, as hitherto, this feature were disregarded, there would be no other reason for isolating them as a group: they can be accounted for in the same way as the remaining düyek material. What is interesting about them is the way they tend to be positioned more frequently towards the beginning and end of (sub)sections. There are no fewer than 18 instances of this feature occurring in cycle 2, thus producing the effect of a melodic unit spanning the first two cycles, particularly in those pieces that begin with fanfare-like passages, where the effect is reinforced by melodic closure at the end of the fourth cycle as well as the second;[108] and although less frequent, we also encounter at the end of (sub)sections a parallel linkage between the penultimate and final cycles to produce an extended cadential passage.[109]

Elsewhere, however, the evidence of tables 20 and 21 suggests that whatever the linkages between cells and even cycles there were rather different formulaic preferences in cells 1 and 2. Thus setting aside the ubiquitous LLL, of those listed the most common in table 21 is the least common in table 20, and each contains four or five entries absent from the other. It might be thought that consideration of the remainder of the düyek corpus would temper this conclusion, but a survey of a second random sample of six pieces (75, 83, 84(a), 86, 87 and 88, yielding 535 cycles)[110] broadly reinforces it, even if the incidence of individual formulae inevitably varies. Thus considering only cell 1, we find that the formulae listed in table 21 account for 69% of the material (actually an even higher proportion than in the original sample), but that the incidence of two, FFF and RFR, is insignificant, while a further two formulae not included in table 21, LFF and FLF, are so common that if added the proportion accounted for would go up to 79%. It may be noted that as neither of these occurs in table 20, it would appear that enlarging the amount of material considered does not appear to have the effect of reducing the differences between the two cells.

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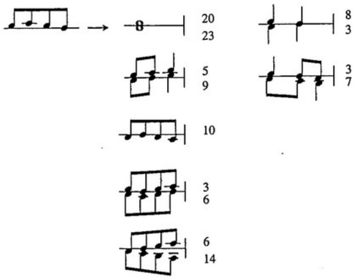
[108] 25 H1a, H3c, 29 H1a 2, 106 H1a and Ma. Some of the other instances are accounted for by subsequent repetition of this material. The effect is particularly pronounced in 130, even if only H2a begins with a fanfare-like passage.

[109] As in 25 H3a, 40 Ma and d, 90 Mc (where there is no initial attack in three of the four cycles), 130 Mc, and in the internal cadences of 106 H3b.

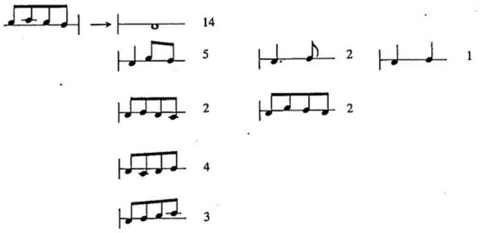
[110] In drawing upon this second corpus no distinction will be made between those cycles in which the onset of a cell is marked by an attack and those in which it is not.

Further differences appear if we turn to an examination of combinatory preferences. Thus if we consider both samples together and take one of the formulae listed for both cells, RFF, we find that where it occurs in cell 1 the most common continuations, which account for no less than 83% of the total, are:



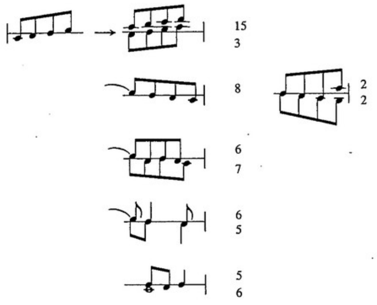
Example 61

while the most common continuations when it appears in cell 2 are as follows:

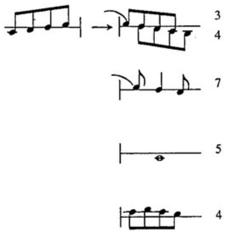


Example 62

There are, obviously, a number of common elements: most of the formulae in ex. 62 appear in ex. 61, and it is significant that the initial pitch of all the more frequent formulae in ex. 61 and of all those in ex. 62 is one step below the final pitch of the preceding RFF. Nevertheless, it is unlikely to be simply a function of differences in the size of the sample that the position of RFF in the cycle appears to affect the degree of predictability of what might follow. That this is so is reinforced by comparison with a further common formula, RRR, where the contrast in incidence as between cells 1 and 2 is rather less. Here the equivalent continuations are as follows:



Example 63



Example 64

Those listed in ex. 63 account for over two thirds of the sample, but those in ex. 64 for less than half, so that although there are, again, a number of common elements, it is clear that the continuation after RRR when it appears in cell 2 is less predictable than when it appears in cell 1, and particularly significant is the absence from ex. 64 of what is by far the most frequent formula in ex. 63.

Common to both, on the other hand, is the frequent occurrence of a following descent (whether articulated as FFF, FLF or FFL). In other words, we are faced here with various manifestations of the rising-falling fourth formulae (ex. 25). Also quite common is the rising formula, which in its most usual manifestation (ex. 24) fits exactly one düyek cycle, and with variants appears in six of the sample pieces, sometimes being used repeatedly.

In the most general terms, it may be said that the remaining vezn-i kebir pieces conform to the picture suggested by the sample, and it certainly seems to be the case that the profile of formulas would not need significant amendment if account were also taken of them. But if the dominant impression created so far is of a homogeneous group, consideration of melodic density suggests that there is nevertheless a spread sufficiently wide to point, not perhaps to a an internal line of cleavage, but certainly to well-differentiated extremes that are typologically distinct. Thus the average number of pitch changes per cycle[111] within the sample varies from 3.7 (in 25) up to 8 (in 184), and even higher figures can be found elsewhere: 9.8 in 27, for example, while 74 has as many as 10.8, and what characterizes the latter pieces is frequent rhythmic subdivision of time units, a feature sometimes wholly lacking from many of the others. When pieces at the two ends of the spectrum are juxtaposed, the impression is of an augmentation/diminution relationship: if the rhythmic values in 74 were doubled it would acquire a physiognomy similar to that of, say, 71, and vice versa if the rhythmic values of 71 were halved; it is as if, in relation to the same percussion underlay and, one must assume, the same normative tempo range, quite different melodic gears could be engaged, and it is against this background that should be set the alternative versions proposed for 84 and 318 in Part i, so that apart from the specific comparison with the ʿAlī Ufḳī version of the latter, the original versions give the impression, despite not being at the very bottom of the pitch-change scale, of having slipped from one gear to the other.

It might be expected that reinforcement of this contrastive perception of the vezn-i kebir corpus could be drawn from the pieces in the other codes, where the greater possibilities of rhythmic subdivision allows greater melodic density. But as the first piece, 287, demonstrates, these possibilities may be used for little more than supplying greater precision, and particularly for specifying ♪.♬ where the vezn-i kebir code is forced to substitute ♫. The general impression it conveys, supported by a middle-of-the-range average of seven pitch changes per cycle, is of a piece that lies comfortably between the two extremes. Most of the others could also be similarly characterized, so that only 291, 310 and 301 (in vezn-i asgar us-sagir), stand out in terms of melodic density. Of particular interest in this respect is 291, where we find that the average number of pitch changes per cycles in H2d and e, 9.2, contrasts with 5.4 in H1c, so that although neither is at an extreme end of the range, they do point to the possibility of combining within the same piece zones of significantly greater and lesser density, with the result that the notion of a change of gear may also be thought of as applying internally as well.

With düyek we reach the end of the survey of cycles with fewer than 16 time units, and before passing on to muhammes and the even longer cycles it may be opportune to review the distribution of formulae encountered so far. For the most common framework, the cell of four time units, the 27 possible configurations (with any moves being restricted to adjacent pitches) is listed in table 8. Of these, five (RLL, RLR, RFL, FLR and LFR) fail to occur with sufficient frequency in any of the cycles so far considered to warrant being considered as part of the formulaic stock, while another seven (RFR, RLF, LLR, FLL, LRR, RRF, LRF) only occur with sufficient frequency in one cycle. This suggests a general avoidance of what have been listed as the variants of LLL, and of most of the group comprising xLL and LLx. If the twelve configurations listed are omitted from the original layout of table 8 and those which occur frequently in every cycle are indicated in bold we have:

LLL	FRL	
	LRL	
LLF	LFL	
	RRL	
LFF	FFL	FLF
RRR		
FFF		
	FRR	
FFR	FRF	RFF

The majority of those that remain are therefore prominent in some of the cycles that have been scrutinized but not in others, as follows:

FRR is prominent in all cycles except berefşan;
RFF in all except çenber;
LFL in all except devr-i kebir;
LRL in all except çenber and fahte;
FFR and LLF in all except devr-i kebir and devr-i revan;
FFL in all except devr-i revan and fahte.
FLF and RRL are each prominent in three of the six cycles.
FRL and FRF are prominent only in devr-i kebir and düyek.

The equivalent possible configurations for cells of three time units are only nine in number, and it is therefore hardly surprising to find that all attain prominence in one or more cycles, but again there are considerable contrasts in distribution. As has been noted, one of the most glaring is that between berefşan and semai, the former avoiding RL and FL, the latter giving prominence to them. Other differences that characterize one cycle as against another have been dealt with already, with attention also being paid to preferences in rhythmic articulation.

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[111] On the basis of the first ten cycles in each piece.

3.6.12 *muhammes*

There are 18 pieces in this cycle:

63-7, 70, 72, 82, 137, 218, 221, 274, 285, 292, 294, 316, 344, 349

of which 285 and 316 are notated in vezn-i sagir, 294 in vezn-i asgar us-sagir, and the remaining 15 in vezn-i kebir. Problematic in düyek was 282, because identical with 218, defined as in muhammes,[112] and one may also point to the change of mind indicated by the heading of 70, where an original düyek entry has been crossed out in favour of muhammes; and if account is taken of the earlier versions recorded by ʻAlī Ufḳī further such confusions arise, for not only does he similarly assign two pieces which for Cantemir are in muhammes (137 and 316) to düyek, he also assigns a third (292) to another 16 time-unit cycle, ferʻ[-i muhammes]. These pieces will be discussed later, as will 72, for which Part i provides alternative transcriptions, with the result that the set of vezn-i kebir pieces to be considered initially is reduced to ten (63-7, 82, 221, 274, 344 and 349).

The pattern of percussions, in which only one time unit is not marked by an attack, is rather atypical:

d t te- d d d t te- d t te- d t 0 tk tk

but it certainly suggests an initial 8 + 8 division, and there are, indeed, a number of (sub)-sections which appear to consist of an odd-number aggregation of half cycles.[113] One may also posit, by analogy with the equation of final /t 0 tk tk/ with a four time-unit cell in other cycles, a primary subdivision of the second half into 4 + 4, and as the initial 8 begins with the same pattern of percussions that defines the first cell of the second half it would follow that the overall melodic structure is likely to be articulated in terms of 4 + 4 + 4 + 4. That such is indeed the case is indicated fairly conclusively by the low incidence of pitches sustained across these postulated cell boundaries: a random sample of 25 cycles[114] yielded just two instances for cells 1-2, two for 2-3 and none for 3-4. Both the 4 + 4 + 4 + 4 division and the possibility of melodic blocks stretching over multiples of eight rather than 16 time units point to a degree of congruence between muhammes and düyek, and thereby render more explicable the occasional hesitations over rhythmic identification, hesitations which suggest, in turn, a degree of coincidence between the two in compositional strategy, so that it would hardly be surprising if the formulaic preferences in muhammes were to echo those encountered in düyek (and be reinforced by the same rhythmic articulations of cadence material), and just as different formulae come to the fore in the two cells of düyek, one might expect to find in muhammes similarities between cells 1 and 3 as contrasted with 2 and 4.

The ten pieces under consideration yield a total of 201 cycles. Taking account in the first instance only those configurations occurring in no fewer than 4 pieces, we find that in cell 4 the basic formulaic stock consists, with variants, of the six listed in table 22, which distinguishes (sub)section-final cycles (column 1) from others (column 2). All involve, if any, only moves to an adjacent pitch:

	1	2		1	2
LLL	53	21	FFL	3	21
FRL	7	4	LFL	2	9
RRR	2	7	FFF	0	14

Table 22

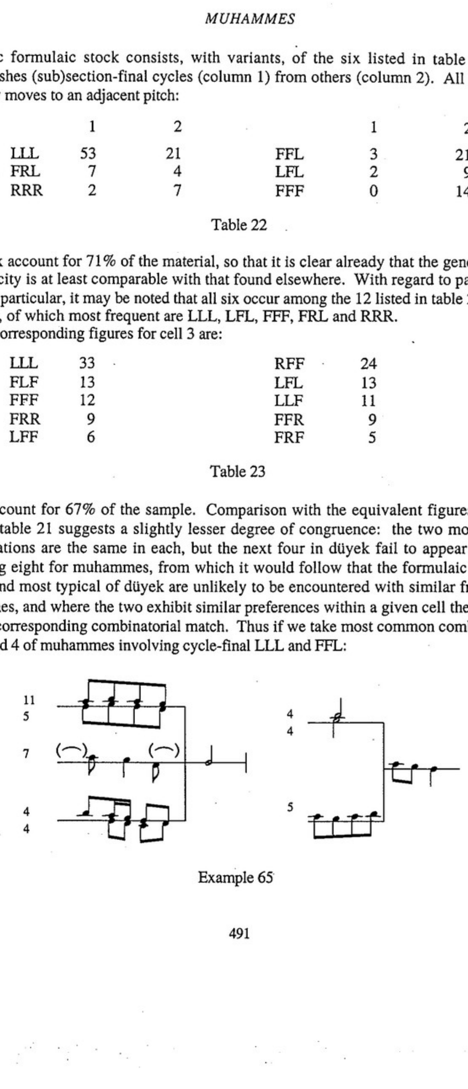
These six account for 71% of the material, so that it is clear already that the general level of formulaicity is at least comparable with that found elsewhere. With regard to parallels with düyek in particular, it may be noted that all six occur among the 12 listed in table 20 for cell 2 of düyek, of which most frequent are LLL, LFL, FFF, FRL and RRR.

The corresponding figures for cell 3 are:

LLL	33	RFF	24
FLF	13	LFL	13
FFF	12	LLF	11
FRR	9	FFR	9
LFF	6	FRF	5

Table 23

These account for 67% of the sample. Comparison with the equivalent figures for düyek listed in table 21 suggests a slightly lesser degree of congruence: the two most common configurations are the same in each, but the next four in düyek fail to appear among the remaining eight for muhammes, from which it would follow that the formulaic concatenations found most typical of düyek are unlikely to be encountered with similar frequency in muhammes, and where the two exhibit similar preferences within a given cell there still may not be a corresponding combinatorial match. Thus if we take most common combinations in cells 3 and 4 of muhammes involving cycle-final LLL and FFL:



Example 65

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[112] One might have expected Cantemir's first index to shed some light, e.g. by entering 282 in the *nā-mevcūd* column and thereby possibly pointing to different lines of transmission, but in the event 282 is located (p. 120) in the *mevcūd* column (although with the page number oddly repeated in the margin, as if it were a later addition) while 218 is absent (the entry for it being added in a cruder later hand beneath).

[113] See the discussion of 65 in Part i.

[114] The first five in each of 66, 64, 82, 274 and 349.

we find on the one hand a very close match with the equivalent preferences in düyek cycles with LLL in cell 2, while on the other there are no combinations with FFL in cell 2 that occur with sufficient frequency to be considered standard concatenations, and certainly not the pairings found typical of muhammes.

For cell 2 the most common configurations are:

LLL	23	FFF	20
LFL	17	LRL	15
LFF	10	FLF	9
RRR	7	FFL	7

Table 24

These account for 54% of the sample. In comparison with table 22 we find that FFL is considerably reduced, while there are three new entries, LRL, LFF and FLF. But this, together with the lower percentage, is not necessarily to be interpreted as meaning that cell 2 is less formulaic. What we encounter, rather, is greater variability. To be noted is that table 24 includes five of the six entries in table 22, omitting only FRL, which appears more frequently as a cadential formula.

For cell 1, finally, we have:

LLL	30	RRR	30
LLF	20	LLR	16
FRR	14	LRR	8
LFL	7	RRL	6

Table 25

These account for 65% of the sample, virtually the same as cell 3, so that there seems to be a slight suggestion of a pattern similar to that discerned in bereſşan whereby the level of predictability dips at a certain point (here in cell 2) and then rises again to reach a peak at the end of the cycle. Nevertheless, what might be predicted for cell 1, that is, the range of preferred formulae, does not tally very closely with that for cell 3: none of the entries in the right-hand column of table 25 appear in table 23; conversely, two of the four most common entries in table 23, RFF and FLF, fail to appear here; and also to be noted is a preference for RRR in cell 1 as against FFF in cell 3. What we do find is a somewhat greater degree of correspondence with cell 1 in düyek, for among the formulae listed in table 25 only LRR is absent from table 21, and while four of the wider range of formulae listed for düyek fail to appear here, one, RFF, occurs eight times in the muhammes corpus and was only excluded from table 25 because it is confined to just three pieces. On the basis of this sample, then, it appears that although certain differences can be detected between muhammes and düyek, both in the formulas preferred in certain cells and in the concatenations thereof, these are not so clear-cut as to provide a mechanism whereby a piece can be securely assigned to one or the other. Nor is there anything distinctive in the use of the other standard features: the rising-falling fourth complex occurs fairly frequently, spaced over four or, more usually, eight time units; and the rising formulae is infrequent, but does appear. Breakage, on the other hand, is absent. But since it is also absent from many düyek pieces nothing follows from these observations save the obvious: that the hesitations and occasional lack of agreement as to whether a given piece should be assigned to muhammes or düyek are grounded in the fact that it may well fail to exhibit sufficient markers pointing to one as against the other.

Examination of the pieces in question, 70, 137, 218 and 316 only serves to confirm this. (137 and 316, it may be recalled, were assigned by ʻAlī Ufḳī to düyek; 218 is twin to the düyek piece 282, while in the heading of 70 Cantemir struck out the düyek identification in favour of muhammes.) Melodic density averages offer no clarification: compared with the range found in the sample for the first group given below in table 26 there is nothing untoward among these four: 70 is right at the upper end (its 15.5 density being in fact marginally outside the range), while 137 and 218 are towards the lower end, with 316 a little higher. It might be thought, in the light of the above findings concerning the distribution of formulae, that a rather better diagnostic tool would be provided by their incidence in cell 3, where certain differences between muhammes and düyek have been encountered, but in the event the results are inconclusive. Ignoring LLL and RFF, common to both, we find that each piece usually contains (and at a level of incidence, given the frequency of internal repetition, unlikely to be statistically significant) formulae preferred in muhammes alongside others preferred in düyek, and yet others common in both. 218, for example, has three instances of LLR, common in düyek but not in muhammes, two of LLF, common in both, and one each of LFF and FRF, common in muhammes but not in düyek; and 137 contains alongside formulae common to both four instances of FFL, common to neither. Nor do these four pieces show any further pointers towards muhammes by exhibiting the formulaic concatenations involving cycle-final FFL given in ex. 65: FFL appears in cell 4 in 137 and 218, but only once in conjunction with one of the three preceding formulae listed. Everything points, in short, to a degree of undecidability, the lack of any clear set of melodic-rhythmic indicators that would provide unequivocal differentiation meaning that an even number of 4 + 4 düyek cycles could be superimposed on half as many 4 + 4 + 4 + 4 muhammes cycles without apparent dislocation, or vice versa.[115]

As before, the incidence of the formulae listed for each cell conceals considerable differences within the vezn-i kebir group, with a particularly low level being exhibited by 274 and 344. Not unexpectedly, this correlates with differences in melodic density, and at this point we may also begin to take account of the pieces notated in the other codes, 285 and 316 (in vezn-i sagir), and 294 (in vezn-i asgar us-sagir). If we place 274 and 344 with these (forming column 2), and compare them with a comparable selection of pieces from the remainder of the first vezn-i kebir group (forming column 1), we obtain the following, which represents the average for the first ten cycles in each piece:[116]

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[115] Accordingly, it might well be argued that Cantimir's original assignment of 70 to düyek would be preferable, at least to the extent that it avoids having an asymmetric total of two and a half cycles in Mc.

[116] Omitting 221 Ma, which consists of one-and-a-half cycles, and the following teslim, which is a repeat of earlier material.

1		2	
72	8.4	316	12.1
67	9.2	344	13.8
63	12	285	16.2
221	12.7	274	16.5
65	14.1	294	22
349	15.4		

Table 26

As these figures suggest, the pieces in column 2 are a mixed bunch. The most straightforward is 316, in which, as elsewhere, the vezni-i sagir code is used primarily to specify ♪.♬ rather than ♫ ; otherwise there is nothing to differentiate it from the vezn-i kebir group. 344 and 274 are later additions: they are both modally atypical, and it is therefore hardly surprising to find that their rhythmic organization also deviates somewhat from the norms previously observed, although this is not to say in relation to melodic structure that they break free in any significant way from the general formulaic preferences of the repertoire. The question is, rather, one of pace, areas of stasis (there are several LLL cells) contrasting with passages dominated by rhythmically subdivided time units (which considered separately would yield a much higher pitch-change average), so that we again seem to be confronted with internal changes of gear. 285 exhibits rather similar characteristics, although the rhythmically subdivided areas are more evenly distributed. Analysed in terms of cells of two rather than four time units, the formulaic content of this material may be seen to be high, although inevitably differently distributed, and with many cycles being clearly divided into balancing halves variously by parallelism, repetition and end-stopping, the general effect beneath the rather busier surface is of structural congruity with the vezn-i kebir majority.[117] The remaining piece, 294, is the only one notated in vezn-i asgar us-sagir and, not unexpectedly, has the highest pitch-change average. But as with 285 there is nothing unusual about the patterning within the cycles, and as with similar cases in berefşan and devr-i kebir one may correlate the tendency towards greater rhythmic subdivision (probably accompanied by retardation) with an increasing stress on end-stopped halves, the second cell frequently providing either a caesura or an area of relative stasis.

Viewed in this light the alternative proposed for 72, in which rhythmic sub-division is also frequent, begins to look rather less attractive. But it is legitimate to argue that what may be a quite late development provoked by incipient retardation should not be taken into account when considering an earlier piece, and as far as 72b is concerned those cycles where the first half is not end-stopped (especially those in which the division is elided) do no more than relocate a feature that occurs at the end of a cycle in 72a, which is itself somewhat unusual in its rhythmic organization. The original is to be defended, rather, apart from the obvious

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[117] The general emphasis on a regular 8 + 8 makes the one subversive deviation all the more significant, the division (by repetition) of the two cycles of Md into 10 + 10 + (8 + 4).

argument that rejecting it requires Cantemir at least to have been unorthodox in his notation, on the grounds that, as with düyek, the melodic movement in some pieces in muhammes may have proceeded at half the speed found elsewhere.[118]

Another case in which a second version has been given is 292, but this is not quite parallel. The original is, rather, a piece exhibiting sporadic internal changes of gear (so that although the pitch-change average varies from 8.8 in H2 to 13.5 in H1b it does not go beyond the range observed elsewhere), and the primary motive for proposing a similar alternative is to be found in the version by 'Alī Ufḳī, for whom it is in fer', to which we may now turn.

3.6.13 *fer'*

There are three pieces in this cycle:

68, 329 and 336.

68 is notated in vezn-i kebir, the other two in vezn-i asgar us-sagir.

The pattern of percussions:

d 0 te ke d 0 t 0 d t d d t 0 te ke

underlines the derivation from muhammes signalled by the fuller form of the name of this cycle, fer'-i muhammes, and as shown in ex. 2 (3.3.2) it is almost identical with that of the first half of muhammes, thus suggesting either that the two should be considered to stand in a broad 2 : 1 tempo relationship (with two fer' cycles corresponding to one muhammes cycle) or that the ratio should apply in reverse to the tempo of the percussion underlay (so that the two cycles would be equal in length). It may be noted that on the latter hypothesis there would be no need to assume the value 1 = 𝅘𝅥𝅯 (instead of the normal vezn-i kebir 1 = ♪) for 68: all values would be doubled, converting the transcription from 16/16 to 16/8. In 329 and 336, on the other hand, where the transcriptions reflect the durations implied by the vezn-iasgar us-sagir code, the switch to 16/8 would create considerable difficulties, and for the moment we may proceed on the basis that the relationship of melody to percussion underlay given in the transcriptions is satisfactory.

Accepting, by analogy with the concluding /t 0 tk tk/ of other cycles, that the final /t 0 te ke/ is to be construed as a cell it is difficult to come to any conclusion other than that we are faced here with another 4 + 4 + 4 + 4 cycle, and this internal segmentation appears with exemplary clarity in all three pieces. They supply a total of 56 cycles, which would hardly be enough to draw conclusions about formulaic preferences even they had been in the same code, and in general there are insufficient features shared by all three to make it possible to define characteristics of the fer' repertoire. The one exception, hardly surprisingly, is provided by the high incidence of end stopping (whether the cycle is (sub)section final or not).

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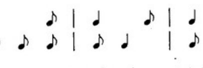
[118] To which may be added that tampering with the original by halving the length of cycles means (and this is a point unacknowledged in the discussion in Part i) that the equivalent for Mb, which consists of three cycles, is a subsection of a cycle and a half. The phenomenon of half cycles may not be particularly rare, but it is hardly a recommendation to have to produce one.

In 68 cell 4 is LLL in every cycle but one, in the great majority of cycles in 329 we have either LLL or its variant FRL, while although not as predominant in 336 there are still ten instances of LLL or its variants. LLL also appears in cells 1 and 2 in 68, and in cell 1 in 336, but not in 329, where the dominant configuration (ignoring slight rhythmic alterations) is FRR which, conversely, appears in 68 but not in 336, where the most frequent configuration is LLF. All these figure prominently in cells 4 and 1 respectively of muhammes, but no such match can be detected in cells 2 and 3. In cell 3 of fer' there is, if anything, a preference for the shape *x*FF, and in cell 2 one may note in a number of cycles a rising interval, a third in 336, a fourth in 68, and in 329 variously a second, fourth, fifth or octave. But it would be unwise to attach too much importance to what may be chance similarities: there is insufficient evidence to establish clear lines of demarcation on a cell-by-cell basis between muhammes and fer', and certainly nothing in this profile of features beyond the least indicative element of all, frequent end stopping, could help elucidate 'Alī Ufḳī's ascription of 292 to fer'.

We may now turn to the remaining longer cycles of more than 16 time units: darb-ı fetih, hafif, havi, nim·sakil, remel and sakil. With these, rather than embark on the extremely tedious process of examining each presumed cell separately we may begin by looking at broader patterns of melodic behaviour, and especially the way in which prominent nodes are signalled. Among the cycles examined above one may note a broad distinction in this respect between those in which the onset of certain cells tends to be marked positively by being associated with a long note (i.e. with an attack on a pitch sustained for two or more time units), and those in which it does not, so that the tendency is then for cell divisions to be marked more usually by end-stopping (and onset might be described as being marked negatively, that is, by being associated with a short note that recommences melodic motion after the cadence-like closure of the long note with which the preceding cell terminates). Symptomatic of this distinction is the contrast between the most frequent rhythmic articulation of the melody in the opening of berefşan and one of the commonest patterns found in semai:



But such clear contrasts are rare, and cycles containing the first type in any case also use the second, so that in berefşan, for example, the end-stopping of the final cell in the cycles is no less standard than elsewhere. Nevertheless, it is clear that the first type predominates in the first two cells of berefşan and, allowing for variant surface realizations, it is also characteristic of devr-i kebir, while in devr-i revan the balance between the two is reasonably even. Similarly in çenber and fahte, but with the other common cycles devoid of triple cells the balance swings a little towards the second type. In cell 1 of düyek there are slightly more cases of initial rather than final long notes, but there is definitely a tendency for cycles to be more frequently end-stopped than not,[119] and the same pattern may be observed in the 16 time-unit muhammes. This is frequently divisible into two halves (8 + 8), but the behaviour of each in not identical: cell 4 is predominantly end-stopped, but in cell 2 as well as in cell 3 there are as many cycles with an initial long note as with a final one, and in cell 1 there are twice as many, so that the predominant effect is of a cycle that is both initially signalled and end-stopped. Whether or not the beginning of the longer cycles is similarly marked it may certainly be expected, especially when (sub)sections now consist only of occasionally two but more usually a single cycle, that they will be predominantly end-stopped: the interesting question is how they are organized internally.

3.6.14 *nim sakil*

We may begin consideration of this last group with the shortest, nim sakil, which has 24 time units. This rare cycle appears in just one piece, 308, in vezn-i sagir (although as the capacity of this code to specify dotted and other rhythmic subdivisions is only sparingly used little would have been lost by a representation in vezn-i kebir). As already noted, the first 18 of its 24 time units are identical with the first 18 of sakil, from which it is obviously derived. The percussion pattern points to a division into five cells of four or six time units:

d 0 te ke
d 0 te ke te ke
d 0 te ke d 0 t 0 0 0 te ke te ke

thus yielding the structure 4 + 6 + 4 + 6 + 4. The evidence of 308 suggests that this is broadly justifiable, but considered alone the melody is better accounted for by 4 + 6 + 6 + (4 + 4), with the final 6 + (4 + 4) being clearly indicated by the shape of the sequentially repeated cadence formula in cycles 2, 8, 10 and 12. If we use * and * to represent pitches sustained over two and four time units respectively (whatever the number of attacks), their distribution is as follows:

	cell	1	2			3		4			5	
cycle	1, 3			*								*
	2, 4			*							*	
	5	*	*						*	*		
	6		*		*						*	
	7, 9, 11		*		*	*	*	*				*
	8	*	*								*	
	10, 12	*	*	*	*						*	

Table 27

This clearly shows a tendency towards cadential end-stopping in the second cell which points towards an underlying [4 + 6] + [6 + (4 + 4)] division suggestive of mirror symmetry on either side of a caesura. Also evident is the length marking, in eight cycles, of the onset of cell 2. Cells 3 and 4, in contrast, have no comparable physiognomy, while the uniformity in cell 5 is attributable to the fact that the even-numbered cycles are all (sub)section final, each one using the same mahur-type cadence formula.

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[119] Six of the twelve most common configurations listed in table 20 for cell 2 end with a long note (L: LLL, LFL, FRL, RRL, LRL and FFL), accounting between them for 49% of the sample, whereas very few are only initially long.

The melodic language is evidently highly formulaic, but there is insufficient material to justify a cell-by-cell analysis. At most one might note the occurrence in five cycles of either LFLFL in cell 2 or LRLRL in cell 3.

Also attributed to nim sakil, but by ‘Alī Ufḳī rather than Cantemir, is H1 of 73 (değişme). However, it is impossible to detect any resemblance between 308 and this single cycle apart from the marking of a disjunction (but with a shift of register rather than a length indication) between time units 4 and 5. It is clearly divided into halves, so that instead of [4 + 6] + [6 + (4 + 4)] we have [4 + (4 + 4) + 4 + (4 + 4)], and without ‘Alī Ufḳī's indication the temptation would be to assume that it consists of two cycles of çenber, the cycle of M, especially given the general resemblance between the beginning of H1 and that of Mc. But the fact that Cantemir specifies çenber for M, just as he specifies the changes in the following sections, implies that H1 should be in some other cycle, even if he does not say which one. Consequently, we must assume either that Cantemir forgot to enter çenber after the initial *serhane* and compensated by putting it in after *mülâzime*, which was still in the same cycle (the changes only beginning later), or, more simply, that the pattern of internal organization suggested by 308 for nim sakil was by no means the only possible one.

3.6.15 *remel*

Almost as rare as nim sakil, remel appears in just two pieces:

277 and 278.

Both are notated in vezn-i kebir, and the latter, by Cantemir himself, is a *naẓīre* of the former. The sequence of percussions in remel:

```
d  0  te  ke  d  0  te  ke  te  ke  d  0  te  ke
d  0  t   0   t  0  d   t   d   d   t  0  tk  tk
```

strongly suggests a division into two halves of 14 time units each, with cells of four and six time units distributed as follows: 4 + 6 + 4 / 6 + 4 + 4. On the other hand, save for one time unit in cell 4 it is also the case that the first four cells are identical with the first four cells of nim sakil, thus suggesting a different possible perception of the whole with which one would expect to be related a certain congruence between the two cycles in the rhythmic organization of the melody. But this, at least on the limited evidence available, is absent: the most obvious feature of the nim sakil piece, the cadential end-stopping of cell 2, appears in neither of the remel pieces. Even if no firm conclusions can be drawn, this suggests that in addition to length the two cycles may have been differentiated by contrasting melodic strategies over the area where the percussion underlay is the same. For example, if one were to consider only 277 as representative it would appear that remel was marked by a tighter fit between melody and cell structure, as can again be seen by plotting, in table 28, the incidence of pitches of longer duration. Further, this evidence suggests that whereas nim sakil is characterized by end-stopping, particularly in cell 2, remel is not: apart from the special case of end-stopping in cell 6, which is (sub)section final in seven of the nine cycles, we find a clear tendency towards cell-initial length (which is of course also present in cell 6). The one cell where both features are completely absent is 5, and it could consequently be argued that for cells 4-6 the division 4 + 6 + 4 would be just as appropriate: the argument for giving primacy to 6 + 4 + 4 would then rest on a different melodic criterion, namely that in most cycles the last eight time units are more readily identifiable as a cadence area than the last ten. Specifically, in all but one of the nine cycles cell 6 consists of LLL, and in four of the eight this is preceded by FFF, the two together evidently forming a cadential complex (FFFFLLL), while what may be identified as a second cadential complex covering the same area (FFrrrfLLL) occurs in a further three of the eight.

	cell	1		2			3			4				5	6	
cycle	1		*		*		*		*			*			*	
	2		*				*			*					*	
	3	*		*			*			*			*		*	*
	4	*		*			*			*					*	
	5	*		*		*	*			*					*	
	6	*		*				*	*		*				*	
	7	*		*			*			*			*		*	
	8	*		*			*			*		*	*		*	
	9		*	*		*	*			*		*	*		*	

Table 28

In the other cells consisting of four time units, 1 and 3, the preferred formula is LFF, which appears five time in cell 1 and no fewer than seven times in cell 3. That a single contour should have such a high incidence is sufficient to suggest that the piece as a whole is highly formulaic, and in fact virtually everything can be accounted for in terms of formulae already detected in other cycles. There is, inevitably, greater variety in the longer cells 2 and 4, but even here one may note five instances of an extended form of the fomula LFF noted for cells 1 and 3.[120] Only in one cycle, H2b, is there a cell the onset of which is not marked by an attack, and if initial length marking were indeed the norm there is only one cycle that might be regarded as rhythmically untoward. This is, interestingly, H1, and it is not inconceivable that the composer was deliberately keeping the listener guessing before reaching the unequivocal rhythmic orthodoxies of remel in the third cell of M, the beginning of which maintains the suspense.

If such suggestions seem wayward, at least to the extent that they take no account of the evidence of the companion piece in remel, it may be simply observed that as one of the compositions attributed to Cantemir himself one would expect 278 to be more resistant to ready characterization, and immediately clear about it is that after the first cycle, partly modelled on that of 277, its cell structure begins to diverge, as can be seen from table 29, which covers the remainder of the piece (and adds - , normally placed after, but in the case of cell 6 placed before, to represent a one time-unit extension of the same pitch without a separate attack):

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[120] Three instance of LFFFF, one of LFFFR and one of LFFFR3.

	cell	1				2						3				4						5				6
cycle	2			*				*						*		*										*
	3 = 6					*								*						*						*
	4					*								*						*			*			
	5	*				*						*						*					*			*
	7		*			*								*				*		*		*			-	*
	8	*		-				*		*		-				*			*		-					*
	9	*		-				*								*				*					-	*
	10, 11							*								*										*
	12			*				*						*												*

Table 29

Thus ignoring the virtual identity in cell 6, which is (sub)section final in nine of the eleven cycles here, we find a considerable difference in distribution when set against that of table 28. No great importance need be attached to the reduction in the number of initial long notes in cell 1, but it is impossible to disregard the changes in cells 2 and 3: the former is now split almost equally between cycles with cell-initial length and others where there is a long note beginning from the third time unit, while the latter exhibits the most dramatic contrast of all, being now virtually devoid of cell-initial length; and 4 now has as many end-stopped cycles as ones with cell-initial length. Because of this variability it would be safer to see in 278 a relaxation of previous norms leading to a greater degree of rhythmic flexibility rather than the imposition of new ones. If 277 points to 4 + 6 + 4 / 4 + 6 + 4 as a supplementary alternative to the 4 + 6 + 4 / 6 + 4 + 4 derived from the pattern of percussions, 278 points to other possibilities: 4 + 8 + 6 + 6 + 4 and 6 + 8 + (4 + 6) + 4, the former undermining the division of the cycle into two halves, and both going against the grain of the percussion underlay. It is this last point that is particularly puzzling, especially when viewed against the higher levels of congruence found in shorter cycles, for it might have been predicted that the needs of memorization for both composer and performer would lead to a greater emphasis on maintaining regularity of rhythmic articulation in the melody the longer the cycle became. But 278 also shows a possible solution to the problem it poses of the unravelling of the tie between the melody and the percussion underlay, for if one has regard to the structure of parallel or sequentially repeated phrases in cycles 2-4, 8 and, especially, 10-12, they can fairly readily be segmented into blocks of eight time units each potentially divisible into two, so that we have (4 + 4) + (4 + 4) + (4 + 4) + 4, and with a string of cells all four time units in length the task becomes simply to memorize how many.

Given the significant differences in rhythmic organization between the two pieces it is hardly to be expected that the formulae identified in 277 would also be characteristic of 278, and apart from the repetition of the opening gesture there is little the two pieces have in common. Most of the material in 278 can be directly related to the known formulaic stock, but it is important to note its pacing, and in many areas it may best be assimilated to the vezn-i sagir type, so that for descriptive purposes it is simpler to look at formulaic strings over a two time-unit stretch.

3.6.16 *hafif*

There are, ostensibly, 13 pieces in this cycle:

94, 114, 145, 155-6, 187, 203, 205, 219, 224-5, 232 and 288.

Of these only 288 is notated in vezn-i sagir, the remainder being in vezn-i kebir. There is, however, a question mark about 225, consideration of which will be held back. 94, 145, 156, 203, 219 and 232 will be taken as an initial sample for analysis, providing a total of 44 cycles (1408 time units).

The pattern of percussions:

```
                d t t 0
                d t t 0
d 0 te ke       d t t 0
d 0 te ke                     d d t te-
                                d t te- d        t 0 tk tk
```

suggests a straightforward 8 x 4 cell pattern, and in the light of the evidence of the two pieces in remel we might expect to encounter here a scattering of cell-initial length marking, a rather higher incidence of end-stopping, and certainly a fairly high degree of congruence, however expressed, between conventions of melodic organization and the regular divisions of the percussion underlay. Further, given the normally symmetrical segmentation of muhammes into 8 + 8, we might expect at least that the mid point of the hafif cycle would be made perceptible, so that it could be divided into 16 + 16.

It would be difficult to think of anything more conclusive as evidence that such is indeed the case than the first piece in the sample, 94. In four of its five cycles the second half announces itself by repeating the beginning of the first half, while in the fifth the first half is clearly defined by internal repetition which gives an unambiguous 8 + 8 structure. The perception of the cycles as falling into two halves is equally unambiguous in 145,[121] and likewise in the remainder of the sample.

Further, cursory examination of the melodic phrasing is sufficient to establish that in many cycles each of the halves is divisible into 8 + 8. One would therefore expect a higher than average incidence of pitches sustained over two time units to occur in time units 15-16 (to match 31-2) and possibly also in time units 7-8 and 23-24 (in the case of a preference for end-stopping) or in time units 1-2, 9-10, 17-18 and 25-6 (in the case of a preference for cell-initial length marking).

Taking the first four cycles in each of the sample pieces, the distribution of pitches of two or more time units in duration may be mapped as in table 30. If one sets aside the final segment, which in nearly every case is cadential, this indicates near equality between end-stopping and initial length marking, preference for the former within the cycle only appearing clearly at the end of the third block of eight: the incidence of the same pitch being sustained over at least two time units at the beginning and at the end of each eight time-unit

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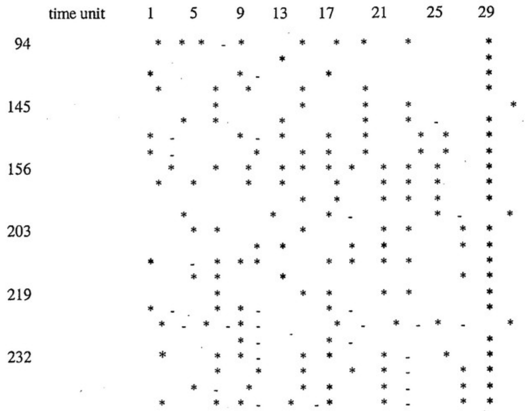
[121] The second half of H1b reappears as the second half of H2b and H3b, the second half of Ma as the second half of Mb, while the two halves of H2a are almost identical.



(* - indicates a pitch sustained over three time units and * - one sustained over six.)

Table 30

section is as follows:

time units	1-2	7-8/9-10	15-16/17-8	23-24/25-6	31-32
	5	12 9	11 12	9 5	24

Cursory inspection of the remainder of the corpus only serves to confirm these findings: in the vast majority of cycles there is no change of pitch in one or both of time units 15-16 and 17-18, so that a fundamental 16 + 16 division is clear,[122] and within each half a symmetrical 8 + 8 pattern is the norm.

In order to provide an inventory of formulaic patterns it therefore seems sensible to regard hafif as consisting of two sets of four cells of four time units each (distinguished where needed as a and b), which will the more easily allow comparison of the incidence of this configuration or that with those found in düyek and muhammes. Considering now the whole corpus, the first point to be made is that it is quite clear, as might have been predicted, that there is no diminution in the amount of formulaic material, so that little would be gained by providing specific percentages for this cell or that. The following surveys of the successive cells also generally subsume under each configuration, without further comment, any variants that have been recognized as such in previous analyses. Accordingly, we find that in cell 1 the more common patterns are as follows (with the first column giving the instances in 1a, the second in 1b):

LLR*x*[123]	11	11
LLF*x*[124]	12	9
RRR	10	11
LFR	8	10
RFF	6	5
LLL	3	6
RFR	5	2
FRL	4	2

Table 31

Comparison with cell 1 in düyek and muhammes shows a number of differences that, even if insufficient in themselves to signal identity, do suggest varying preferences. Thus from table 21) we can see that hafif favours two configurations, RFL and its retrograde equivalent LFR, that are not important in düyek, while there are seven that occur frequently in düyek but are much less significant in hafif. Equally, table 25 shows that four of the most common configurations in cell 1 of muhammes fail to appear prominently in hafif, while in addition to RFL and LFR there are a further two, RFF and RFR, that are of significance in hafif but not in muhammes.

Cell 2 exhibits a rather wider range with, concomitantly, no formula accounting alone, like the top three in table 31, for 10% of the material in each half of the cycle. Further, while most formulae occur fairly equally in 2a and 2b, there are a few that are important only in one, as table 32 shows. The profile here is fairly similar to that in muhammes, especially if FRL, favoured in hafif, is regarded as belonging to the same formulaic complex as LLL, the most common formula in muhammes. Otherwise the major difference is in the prominence accorded in hafif to RRL and FRF, neither of which appears in table 24. Comparison with cell 2 of düyek (specifically with column 2, for non-(sub)section-final cycles, in table 20) shows, the absence of LLL apart, an even greater degree of overlap, suggesting therefore a high level of congruence between all three cycles in this area.

In cell 3 the imbalance between the two halves of the cycle increases considerably, for the obvious reason that in the great majority of cases 3b is related to the cadence in 4b, and the two may best be considered together. In 3a the most common formulae are all ones that have appeared already in table 31. There are, inevitably, certain differences of emphasis (RRR, for example, one of the most frequent in cell 1, is relatively inconspicuous in 3a), but the clearest indication that 3a does not simply echo 1 is that virtually absent from it, with a total

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[122] In the remaining cycles there may also be an indication that the halfway point has been reached, most frequently by a change of melodic direction, as in 145 H1b, H2b, H3a and b, 156 Ma, 187 H1b, 205 H2b and 219 H2a and b, but also by the onset of a particular formula, as in 114 Mb.

[123] The rising interval may be a second, fourth, fifth or octave.

[124] The falling interval may be a second or third.

LFF	8	7
RRL	7	7
LFL	5	9
FRF	5	8
RRR	4	8
FFF	5	5
FFL	3	6
LR*x*L[125]	5	4
FRL	11	2
FFR	2	7
LLF*x*[126]	1	6

Table 32

of four occurrences between them, are the related L formulae (LLL, LFR and FRL) that make up a significant part of table 31. Comparison with cell 3 of muhammes suggests, contrary to cell 2, that there are few similarities: of the five most common configurations in 3a of hafif only two appear in table 23.

Cell 4a is clearly differentiated from its cadential counterpart 4b, most obviously by the fact that whereas we encounter little but LLL in the latter, in the former it is extremely rare. The number of formulae that dominate in 4a is nevertheless quite small, the most common four accounting for 62% of all cycles:

FFF	21	FFL	17
FRL	12	LFL	11

However, even though LLL itself is insignificant in 4a, if we again assume a functional equivalence between it and FRL, we can see that there is a close correspondence between this profile and that for cell 4 in non-(sub)section-final cycles in muhammes, where the most common four configurations (in a sample of similar size) are:

FFF	14	FFL	21
LLL	21	LFL	9

The formulaic repertoire of the first half of a hafif cycle thus resembles that of muhammes closely in cells 2 and 4, but less in cells 1 and 3.

As far as 4b is concerned one may simply note that the vast majority of cycles end LLL[127] and pass on to consider the ways in which the predominant configurations in 3b combine with it. These are:

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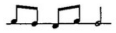
[125] The rising interval may be a second, fourth, or fifth.

[126] The falling interval may be a second or third.

[127] There are a few in the related FRL, but otherwise one need only note the more varied manifestations of 4b in 225, on which see below.

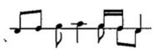
RFF[128]	28	FFR[129]	10	FLF	11

and the cadential complexes in which they appear, with exception of:



which appears in two pieces, are all to be found in the left-hand column of ex. 65, so that there is again a considerable degree of commonality between hafif and muhammes in their preferred cadences, even if the range in the former is narrower.

Of the other formulaic patterns that have been seen to occur in several rhythmic cycles, the least important in hafif is breakage. Indeed, as this only appears in 225, the status of which is dubious, it would be safe to say that it simply does not form part of the normal formulaic armoury of this cycle. Common, in contrast, is the rising formula, perhaps unsurprisingly in view of the fact that its normal span is eight time units. It occurs nine times in all, most frequently spread over cells 3a-4a, but also over 1a-2a and 1b-2b. Just as frequent is the rising-falling fourth formula, nearly always in the scalar variant and again laid out over a span of eight time units, typically:



With other variants this appears eleven time in all, mainly in cells 1a-2a and 1b-2b.

Finally, it may be noted that the general pace of events in hafif, measured by the number of pitch changes per time unit, is relatively leisurely. Taking the average number of pitch changes in the first five cycles of the first five pieces in the sample, we have:

94	21.2
145	23.6
156	22.8
203	20.8
219	24.2

Such a narrow range suggests a certain cohesiveness, and the global average yields a comparatively middle-of-the-range figure of 0.7 per time unit. That this is likely to have been characteristic of the hafif corpus as a whole is also suggested by 288, the one piece notated in the vezn-i sagir code, which with an average of 25 is only a little above 219.

But there is one piece that does stand out: the questionable 225, which yields the markedly higher figure of 32.2. Its much busier melodic surface might, it is true, be explained by its function as a dance piece, but taken together with other factors it is also suggestive of mistaken identity, of a piece that simply does not belong in hafif. The first of these factors is external: although the heading of 225 clearly defines it as being in hafif, the index (p. 111) assigns it to düyek, and to the doubts thereby raised may be added a number of features that are unusual when set against the norms of the rest of the hafif corpus. The most obvious, apart from its much higher pitch-change average, is its length: in the other pieces we find a sprinkling of (sub)sections of two cycles, but the great majority are of one, whereas in 225 Mb contains an unprecedented four cycles. Within this subsection one may also observe at the midpoint of 1 and 4 an unusual change of register[130] (a feature that also occurs in Ma), while in H2b and c we find in this position identical examples, a fifth apart, of breakage, a phenomenon that fails to appear in any other hafif piece. Further, one may note that there is no parallel elsewhere to the inclusion of a variant of the rising formula in cells 3b-4b in Mb, and in H3b and c that the positioning of the rising-falling fourth formula in cells 3a-4a is also unusual. Finally, the ubiquitous LLL of cell 4b in other hafif pieces occurs here a meagre seven times in 14 cycles; the remaining configurations are atypical; and where LLL does appear it is accompanied by none of the configurations that most frequently precede it in cell 3b. These various features appear less problematic in düyek, and the index definition is consequently to be preferred.[131]

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[128] The rising interval is normally a second, but in three cases a third.

[129] The rising interval may be a second or third.

3.6.17 *sakil*

The following 37 pieces are in this cycle (144 and 307 being the same), which makes it, after düyek and devr-i kebir, the third most frequent of all:

> 31, 78-80, 89, 92-3, 113, 124-9, 142-4, 146, 159-62, 168, 180, 198, 202, 208, 228, 236, 280, 307, 309, 312, 317, 324, 334, 342 and 346.

None are notated in vezn-i asgar us-sagir. 280, 309, 312, 317, 324 and 334 are notated in vezn-i sagir and the remainder in vezn-i kebir. Of these an arbitrary selection of 78, 89, 113, 126, 129, 144, 160, 168, 202 and 236 will be taken as an initial sample for analysis, providing a total of 82 cycles.

When compared with the hafif corpus, it is immediately apparent not only that each cycle within a sakil piece is considerably longer, but that there are more cases of multiple subsections and, even discounting a tendency to write out prima/seconda volta versions in full, more cases of (sub)sections containing more than one cycle. In short, sakil pieces tend to be far more substantial: there is nothing in hafif to compare with, say, 93, which has a total of 13 cycles, each presumably repeated. But the significance of the difference might be primarily a matter of genre, and as far as the structure of the cycles is concerned it seems reasonable to begin by noting the simple 3 : 2 length relationship between the two, which suggests that if hafif can be regarded, whatever further internal divisions might be detected, as consisting of an overarching 16 + 16, then sakil might likewise function melodically in 16 + 16 + 16

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[130] In 1 the jump is only partially disguised by the descent in time units 15-16 (to be analysed as a form of breakage). There seems to be an even more obvious instance in 3, but given the leaps that characterize the whole second half it fails to stand out as particular significant in itself.

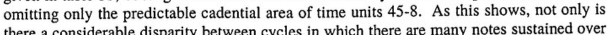
[131] The same conclusion is reached by H. Sanal (*Mehter musikisi. Bestekâr mehterler—mehter havaları*, Istanbul: Millî Eğitim Basımevi, 1964, p. 172), who perhaps thought it all too obvious to warrant discussion and simply defined the piece as in düyek. Since the preceding piece in the collection is also in hafif the most likely explanation is that the heading of 225 contains an inadvertent repetition.

spans. However, the pattern of percussions:

d 0 te ke
d 0 te ke te ke
d 0 te ke d 0 t 0 t 0
d 0 d 0 t 0
d 0 t 0 t 0
d 0 te ke d d t te-
d t te- d t 0 tk tk

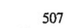
suggests a 4 + 6 + 4 + 6 + 6 + 6 + 4 + 4 + 4 + 4 cell pattern (and therefore, if there is to be a tripartite division, spans of 14 + 18 + 16).

With sakil and, *a fortiori*, the remaining two cycles, havi and darb-ı fetih, which are even longer, one would assume a need at least to maintain if not, indeed, to increase the level of mnemonic assistance provided by a congruence between melodic patterning and the percussion underlay. One might also expect that the larger internal spans would be regularly marked, providing well-articulated divisions facilitating both creation and memorization as structures become ever more complex and difficult to control. A perfect example occurs at the beginning of 144 (repeated an octave higher in H2), where there is an obvious fit between the rhythmic configuration of the melody and that of the pattern of percussions:



d 0 te ke d 0 te ke te ke d 0 te ke / d 0 t 0 t 0 d 0 d 0 t 0 d 0 t 0 t 0/

But such clear-cut examples are not so frequent as to allow the conclusion that matching the rhythmic articulation of the melody to the percussion underlay was an overriding structural principle in sakil. In many cycles the relationship appears tenuous, and 144 also provides us with the counter-examples of Mb and H3, where even if the latter is set aside as a more labile part of the composition in which previously established modal and rhythmic norms might be treated with some freedom Mb remains as a clear instance of a regular 4 + 4 melodic structure cutting against the percussion pattern:



d 0 te ke d 0 te ke te ke d 0 te ke / d 0 t 0 t 0 d 0 d 0 t 0 d 0 t 0 t 0/

Where these contrasting cases concur is in suggesting that while a choice could be made between alternative approaches to segmentation, one relying on equal divisions, the other maintaining the cell structure of the percussion underlay, the rhythmic feature preferred for marking internal groupings was cell-initial length.

Evidence to evaluate how representative these cycles are may be taken from a survey, given in table 33, of length distribution in the first two cycles of each piece in the sample, omitting only the predictable cadential area of time units 45-8. As this shows, not only is there a considerable disparity between cycles in which there are many notes sustained over two or more time units (such as those in 144) and others in which there are few (or, in the case of the second cycle of 168, none), but there is also no overwhelming majority for either

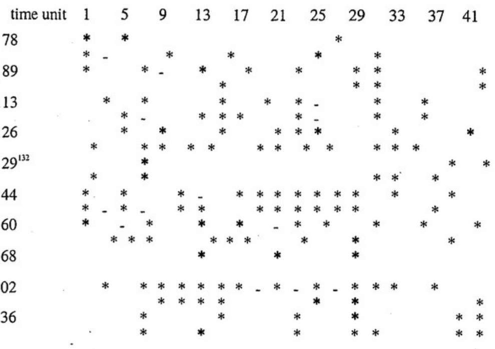


Table 33

16 + 16 or 14 + 18, although there is certainly a consensus that the point at which they converge is of significance: the double block of 32 time units is end-stopped in 14 cycles, and the following block is marked by cell-initial length in five. If one then considers the 14 + 18 division suggested by the percussion underlay, it will be seen that the first block is end-stopped in four cycles and the second marked by cell-initial length in seven. But the figures for the 16 + 16 division are exactly the same, seven and four, and if end-stopping is the preferred segment marker, as is indicated by the block of 32, it seems marginally more likely that 16 + 16 took precedence over 14 + 18, and that this is so is also suggested by the distribution of length within each block. Thus in relation to a (4 + 6 + 4) + (6 + 6 + 6) cell structure one would also anticipate higher than average clusters around the internal nodes at time units 5, 11, 21 and 27, and these fail to materialize: within the first block it is, rather, over time units 7-8 that a pitch is sustained in an above-average eight cycles, which would point rather towards an end-stopped (8 + 8), while in the second the corresponding peak occurs at time units 23-4, over which a pitch is sustained in ten cycles, again pointing towards a second end-stopped (8 + 8). Contrary to the initial conclusion, therefore, this evidence suggests that the rhythmic feature preferred for marking internal groupings was end-stopping, and that equal divisions were favoured over those implied by the percussion underlay, so that the more common longer cycles considered so far can be seen as being underpinned by a perception of blocks of eight time units, two in muhammes, four in hafif, and six in sakil. But it is still the case, in spite of what might be presumed to be a need for

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[132] The two cycles here are 1 and 4 (because of written out prima/seconda volta variants). The notes marked * are in each case sustained for five rather than four time units.

greater regularity in internal patterning as cycles increase in length, that preference for a steady flow of segments each eight time units in length is by no means always apparent, so that in contrast to the rather obviously insistent end-stopping of, say, 125 Ma or H3, other pieces only show it intermittently or, indeed, propose counter-rhythms within the larger spans, as in 31 H1a and M, where melodic repetition requires that the cycle be construed as (6 + 6 + 4) + (6 + 6 + 4) + (6 + 6 + 4), or 144 which, as noted, switches between the various options, or 92, where an insistently square 4 + 4 ... in H2 is replaced in H3 by 6 + 6 + 8 + (?4 + 4 + 4) + 6 + 6 + 4. Thus if one has regard to note length and phrase repetition as the prime criteria of segmentation the final impression is of an unexpected fluidity of compositional strategy, the melody often proceeding with a rather steady pulse and consequently not always being readily perceived in terms of one rhythmic template rather than another. As one last example we may take 160, where H1 proposes 16 + 16 + 16 spans which are reinforced by Mb but interrupted in Ma by the sequential repetition of a block which extends an eight time-unit formula in H1 to ten time units, so that we have (10 + 10) + 12 + 16.

It would follow from the above that the range of four time-unit formulae prevalent, if with possibly indicative local variations in the order of preference, in düyek, muhammes and hafif might also be expected to furnish the core vocabulary of sakil, and it hardly requires detailed examination of the corpus to establish that this is indeed the case. Neither here nor in the two longer cycles that remain would it be profitable to conduct a complete cell-by-cell survey, but taking just the initial cell of four time units as an example[133] we find that the most common formulae are:

RRR	14	LLL	12
RFF	11	LLF	8
LLR[134]	7		

Table 34

Together with the extremely common rising formula (covering the first eight time units), which occurs no fewer than 16 times, they account for 68% of the cycles counted. As expected, these five also appear prominently in the equivalent lists for cell 1 in the other three cycles: all in düyek (table 21) and hafif (table 31), and all except RFF in muhammes (table 25). But there is, again, a difference of emphasis, for if we consider, say, the list for hafif, we find that of the three other formulae noted as common two (LFR and FRL) only appear once each in the sakil sample. In general, therefore, sakil appears to differentiate itself from the others at the beginning of the cycle by the narrowness of the range of its preferred configurations, and by the prevalence of the rising formula.

This last also occurs occasionally elsewhere, but in the remainder of the cycle it is rather the rising/falling fourth formula that is prevalent, nearly always in the scalar variant. There are one or two instances of it being spaced over four time units (as in 78 H1), but the standard shape, if with some internal rhythmic differentiation, is over eight time units,[135] and the sample contains over 30 examples of it in this form. Particularly noteworthy is 78 H2a, which ends with three successive (but different) manifestations of this formula. Extremely rare, in contrast, is breakage.

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[133] For this purpose increasing the number of cycles to 100 by including 31, 79 and 80 (but counting only one of the prima/seconda volta pairs).

[134] Including also examples where the rising interval is greater than a second.

There is little in the remaining pieces that runs counter to the above outline. In those notated in vezn-i sagir the code is, as often elsewhere, used primarily to record dotted rhythms, and the melodic surface is otherwise hardly to be differentiated from that of pieces in vezn-i kebir. The first of the group, 309, is another of those where most cycles divide neatly into 16 + 16 + 16 spans, and this pattern is confirmed by the others as standard,[136] the only significant exception being provided by M in Cantemir's own 280, an unusually long through-composed section of four cycles which begins with length to mark the segments of the same pattern, shifts in the second cycle to the appropriate placing of short repeated phrases but then, in the third, hints if anything at an 18 + 18 + 12 division and possibly, in the fourth, at an initial 20.[137]

Accepting, then, that the formulaic language of sakil drew upon familiar resources, and that the predominant tendency was to establish an internal 16 + 16 + 16 segmentation,[138] it might be useful to see whether there were any melodic strategies that might have been used in addition to or, more importantly, instead of end-stopping, cell-initial length and repetition in order to help indicate the major nodal points. Scrutiny of the first piece outside the original sample, 31, which has a very clearly marked 16 + 16 + 16 segmentation, suggests that in addition to length (L), change of melodic direction (D) and shift of register (R) might have been such additional factors. Neither is operative in H1a, which relies on repetition, but in the remainder of the piece we have:

H1b	L+D	D	M1	L+R	L+R	2	R	D
H2a1	-	L	2	D	L+D	H2b	R	-
H3a	L	L+D	H3b	L	L+R			

This shows that D or R may co-occur with L (thus presumably reinforcing the segmentation) and suggests, more importantly, that if they are regarded as adequate indicators by themselves then in only two cycles is one of the major nodes unmarked. But elsewhere there are few cycles which D or R alone might help to disambiguate: in the very next piece beyond the sample, 79, there are just three instances,[139] thus leaving seven nodes still unmarked, two of them in the same cycle.[140] This is not to say that D and R are without effect, but rather, at the end of the day, to recognize that once the identity and normal segmentation of a cycle had been adequately established (and there is no doubt that 79 H1 fulfils that requirement) a certain freedom might come into play, possibly involving the thwarting of expectations and an aesthetic of surprise. Thus in 79 again, to take just one example, Ma 1 effaces the second node in the process of producing a mirror-like structure which begins and ends with the rising formula (giving 8 + 32 + 8), but then uses internal repetition to divide the central block in ways that would be difficult to anticipate, and at the same time produces overlaps by making the final note of one formula the initial note of another, so that with the notes with dual function (set between slashes) written twice and with repeated material placed vertically beneath we have:

```
6 + /2  =  2/ + 4   +  4 + /2 =
           2/ + 4   +  4    +    4
                                 4    +    6 + /1 =
1/ + 7
```

We thus gain the impression, more than with the other long cycles, that on the wide canvas. sakil provides a limited formulaic palette could be manipulated with considerable ingenuity not only to establish broad patterns but also subtly to vary them.

Limitation also extends to a relative lack of contrast in note length or, more precisely, to the dominance of 𝅘𝅥𝅮. There are a few pieces, such as 78, in which subdivided time units are frequent, but in general the melodic pace is fairly measured: it is even possible to find a cycle (92 H3b) in which 𝅘𝅥𝅮 occurs 44 times in succession. But usually there is also a proportion of longer values, and as a result if we take the first two cycles in each piece in the sample the melodic density range, which goes from 30 per cycle in 202 to 44 in 78, yields an average of 0.76 pitch changes per time unit, very close to that for muhammes. For the most part the vezn-i sagir pieces fall within the same range, but not unsurprisingly there are two, 312 and 334, which yield the slightly higher figure of 46 per cycle.

There is, finally, the cadence area to consider. As might be expected, many (sub)sections end LLL (and a further handful with variants), and there are also a few approaches to it that occur sufficiently frequently for it to be possible to define, as in other cycles, formulaic complexes spanning eight time units (e.g. FFFFLLL and RFFFLLL). The point to be made here, rather, is that there are at least ten pieces[141] in which several cycles share a more extensive cadence, one spanning not eight but 16 time units, so that here we can think of 16 + 16 + cadence, the variable segment thus coinciding in length with a cycle of hafif, the invariable with one of muhammes.

It remains to be seen whether this kind of relationship is taken one stage further in the next cycle, which exceeds sakil in length by a further 16 time units to reach a total of 64.

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[135] Sometimes ending FR, i.e. descending a step below the initial pitch and then returning to it.

[136] Although as before there may be a more obvious length indication of the end of the 32 time-unit block than of the first 16, a particularly (even insistently) clear instance being provided by 312.

[137] Equally deviant is 346, a later fragment attributed to ʻIṭrī, where the beginning of the first (and only complete) cycle begins with free variations on the rising formula that imply 8 + 8. But it fails to establish this pattern and neither in what remains nor in what is recorded of the second cycle is any clear segmentation established: at best one might propose in the first cycle 24 + 12 + 12 and in the second an initial block of 14.

[138] A further indication that this was the standard perception is provided by the dots added to the notation of 346.

[139] Mb1 R, 2 D, H2a D.

[140] H3a where, however, L and D at least allow an 8 + 32 + 8 division.

[141] 89, 92, 113, 124, 128, 142, 143, 161, 208 and 346; and in 79 we find some cycles with a shared area of 16 time units, others with 14.

3.6.18 *havi*

There are three pieces in this cycle, all notated in the vezn-i kebir code:

150, 179 and 222.

From the pattern of percussions:

```
d 0 te ke         d 0 t 0
d 0 te ke te ke
d 0 te ke te ke   d 0 t 0 d 0
d 0 te ke te ke
d 0 te ke                       d d t te-
                                  d t te- d   t 0 tk tk
                                d t t 0
                                d t t 0
                                  d t te- d   t 0 tk tk
```

we may obtain the following sequence of 14 cells in which, as has been pointed out, the bracketed block is identical with the last 16 time units of sakil: 4 + 4 + 6 + 6 + 6 + 6 + [4 + 4 + 4 + 4] + 4 + 4 + 4 + 4. This suggests a probable 16 + 16 grouping for the second half of havi, and we could also hypothesize that in the first half too the cells are likely to cluster into spans forming compositional matrices, either within a narrow 14 to 18 time-unit range: (4 + 4 + 6) + (6 + 6 + 6) or, one might surmise, by pairing like with like: (4 + 4) + (6 + 6) + (6 + 6). On the other hand, the evidence of the preferred melodic structures in sakil would suggest that, parallel to the large-scale 16 + 16 of the second half, the spans in the first half are more likely to be 16 + 16 than either the 14 + 18 or 8 + 12 + 12 possibilities to which the percussion underlay points.

Taking as evidence the distribution of length over the first 50 time units in the first five different cycles in each of the three pieces, we have:

```
      time unit 1   5   9   13  17  21  25  29  33  37  41  45  49
150                 * * * *     * * * * * -   *
                       *    * *        *    * *        *    * * *
                  *   *           * * *       *    *    *       *
                            * *   *     * *     * *         *
                      *       *       *                     *   *
179             * - * *       * * - * *     * *  *  *     * *   *
                      *     *       *       *   * - *     * *   *
                * - * - * -     * - * - * -*  * -*  *     * *   *
                              *    *  *               * -     *  *
                * - * *         * - * *       *       * -   *   *
222                 *   * -         *   * -           *
                                                            *
                            * -             *   *        * *  *
                    * -             * -           * - *     * -
                    *           *   *           *   *       *
```

Table 35

from which it will be seen that in relation to an aggregation of (4 + 4) blocks the incidence of end-stopping and cycle-initial length over the first half of the cycle is:

1	4 **5**	8 **9**	12 **13**	16 **17**	20 **21**	24 **25**	28 **29**	32 **33**
3	1 7	6 3	1 4	5 5	3 9	6 4	1 4	8 4

while in relation to the (4 + 4) + (6 + 6) + (6 + 6) alternative the distribution is:

1	4 **5**	8 **9**	14 **15**	20 **21**	26 **27**	32 **33**
3	1 7	6 3	4 5	3 9	4 1	8 4

The comparison is thus inconclusive, for the only points at which there are clear peaks are ones common to both, so that we are left with what appears to be a fairly clear indication that, as with sakil, there was an end-stopped block of 32 time units (which here divides the cycle into halves) and that the favoured internal structure of this block was either 20 + 12, the division being marked by initial length in the second member, or, with end-stopping, 22 + 10 (with the percussion underlay pointing rather to the former); and one may also note a weaker indication of a tendency to mark, by either method, the second cell (time units 5-8). In the second half of the cycle there is only one strongly marked area, the fourth cell (time units 45-8), emphasized by both end-stopping (in nine cases) and cell-initial length (in ten). The final result is thus to suggest a preference for marking 4 + 4 + 12 + 12 + 12 + 4 + 12 + 4, a distribution that fits both a regular succession of cells of four time units and the pattern of the percussion underlay.

Reference to melodic structure, on the other hand, and in particular to the positioning and length of repeated phrases, shows that this apparently neat compromise (or conjunction) is unconvincing. In fact, it suggests something rather simpler (and incidentally points to the potential weakness of conclusions derived from consideration of just one parameter). Perhaps the clearest examples are provided by 150 Ma and 222 Ma, where a twice-repeated phrase gives an obvious 16 + 16 + 16 + 16 structure to the cycle as a whole, and there are several others that again point unequivocally in the same direction.[142] Of the remainder, most are also best understood in terms of a 16 + 16 first half,[143] leaving only the initial large-scale repetition of 150 H1 to insist on a different division, 12 + 12 + 8. The conclusion is, therefore, that havi does indeed build upon the sequence of multiples of 16 running from muhammes through hafif to sakil.

But although a sample of just three pieces is insufficient to draw safe conclusions about formulaic preferences, there is little to suggest a close relationship with sakil. Thus of the preferred opening moves in sakil listed in table 34 only the least frequent, LLR, is a visible presence in the same position (as either LLR or LLR3): the remaining four muster only one occurrence between them, as compared with four for FRF (usually extended to FRFRF), while the even more common rising formula (especially at the commencement of sakil cycles) is virtually absent from these havi pieces, which also contain very few examples of the rising/falling fourth formula.

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[142] 179 H3, 222 H1, H2 and H3, all of which divide the first half into 16 + 16; 150 H2b, with a sequential 8 + 8 + 8 + 8; and 179 H1 and Mb, which begin 8 + 8 + 8.

[143] If we again appeal to change of melodic direction (D) and shift of register (R) as supplementary indicators, the first two blocks are marked thus: 150 Mb: D; end-stopped, H2a: end-stopped; -/cell-initial length, H3a: R; D, H3b -/cell-initial length; end-stopped, 179: end-stopped (+breakage); end-stopped, H2: end-stopped; -, 222 Mb: /repetition; end-stopped.

Where the two cycles do resemble one another is in their melodic pacing, ♪ being again the most common value.[144] Subdivided time units are extremely rare, except in 222 which, not surprisingly, has much the highest number of pitch changes per cycle, 57.3 (taking the average over the first three cycles) as compared with 48.3 in 150 and 41.6 in 179. The global average number of pitch changes per time unit is 0.77, virtually identical with that for sakil.

Finally, the expectation that pieces in havi might tend to resemble that group of sakil pieces in which several cycles share melodic material extending over the last 16 time units is partially fulfilled. This phenomenon appears strongly in 179 (in all (sub)sections except H2), and partially in 150 (in H1, H2b and H3b). But it does not appear at all in 222, where the five cycles share two cadences covering the final eight time units, and even greater variety is encountered among the remaining four in 150, which use three different finalis notes and different approaches to them.

3.6.19 *darb-ı fetih*

There are 26 pieces in this cycle:

1-21, 209, 217, 275, 323, 345

All except 323 are notated in vezn-i kebir, and as the change of code to vezn-i sagir in 323 is only used to specify occasional dotted rhythms the corpus can be dealt with as a single whole. As an initial sample for consideration we may take 1, 4, 7, 10, 13, 16, 19, 209 and 323, although in general it may be observed that despite the extent of the darb-i fetih corpus its broad conformity with the features seen as normative in sakil and havi means that detailed examination is superfluous.

With this, the longest cycle of all, we might anticipate an increased need to supply mnemonic assistance through well-articulated internal divisions, and the kinds of melodic patterning encountered in the other long cycles indicates that these are more likely to be provided by a succession of 16 time-unit spans than by congruence with the percussion underlay. However, whereas the preceding cycles were simple multiples of 16 (two in hafif, three in sakil and four in havi), darb-ı fetih does not continue the series: its 88 time units require a different division or, rather, some further subdivision to allow at least one span of eight. But one block of 16 can certainly be identified, for the tendency noted in sakil and havi for a number of cycles to have the same melodic material extending over the last 16 time units is here a norm.[145] It may, indeed, be extended further, the extreme case being 209 where, with minute variations, all cycles have common material over the last 32 time units. If we take this piece as a model we have therefore a clear pointer to both a final and a penultimate span of

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[144] Appearing 41 times in succession in 222 Ma.

[145] In the sample the only cycles not to conform are 1 H1 and 10 H2 and H3 (which, however, themselves share material extending over 24 time units). In 19 the last 12 time units are common to all, with alternatives in the preceding four).

16, and the question then is how the remaining 56 time units are divided. The answer 209 provides is quite explicit: ignoring possible subdivisions of 16 into 8 + 8, H1 has an initial span of 16 marked by final length (in fact by FRL, a common medial cadential formula in all the long cycles) combined with ensuing repetition, followed by a second span of 16 marked by final LLL and ensuing register shift, and then three spans of eight identified by sequential repetition, thus giving a symmetrical total of 16 + 16 + 8 + 8 + 8 + 16 + 16. The remaining cycles generally accord with this division, although H3 suggests 8 + 16 as an alternative to the central 8 + 8 + 8.

In relation to the percussion underlay:

```
d 0 t t
d 0 t t te ke
d 0 t t           d 0 t 0
                  d 0 t 0
d 0 te ke         d 0 t 0
d 0 te ke te ke
d 0 te ke te ke   d 0 t 0
                  d 0 d 0
d 0 te ke te ke
d 0 te ke                            d d t 0
                                       d t d d    t 0 te ke
                            d t t 0
                            d t t 0    d t d d    t 0 te ke
```

this seems in principle no more aberrant or unusual than what has been encountered in sakil and havi: in the first the percussion pattern provides a final span of 16, and in the second two such spans, while what precedes failed to coincide with the predominant phrase patterns of the melody, and here again we have two final spans of 16 preceded by lack of congruence: 4 + 6 + 4 + 4 + 4 + 4 + 4 + 6 + 6 + 4 + 4 + 6 + (4 + 4 + 4 + 4) + (4 + 4 + 4 + 4). But there is certainly a difference of degree, for if we set aside the first cell of 4 (in havi the first two) as in conformity with the implied subdivisions of the initial span of 16, and count from time unit 9 (in havi time unit 13), the point at which the melody and percussion segments part company, we have in sakil a stretch of 24 time units before they converge again, in havi one of 20, but in darb-ı fetih one of 48, so that it would be hardly surprising if other patterns were to be observed which reduced the disjunction by foregrounded further points of contact with the percussion underlay during the course of this stretch. However, if we consider the distribution of length in the first two cycles of the remainder of the sample in relation to the pattern suggested by 209 the results point to a certain degree of conformity, as table 36 shows. Taking both end-stopping and cell-initial length into account, the node at time unit 17 is marked in nine cycles (out of 16), that at 33 in ten, that at 41 in ten, that at 49 in eleven, and that at 57 in eleven; and it is instructive to note that even if the margin is sometimes narrow these figures are consistently higher than those for the nodes in this stretch which relate to the percussion underlay: thus time unit 31 is, by the same criteria, marked in five cycles, 37 in eight, 43 in four, 47 in nine, and 51 in eight. (The comparable figures for the

time unit	13		17	/	29		33		37		41		45		49		53		57
1		*	-		*	*		*		*				*	*	*	*	*	
	*					*		*	*		*		*		*	*			
4	*		*						*	*				*		*			*
			*				*			*									
7	*									*		*	*	*	*	*			*
		*	*		*	*	*	*			*				*		*	-	*
10	*	-					*	- *		*			*					*	
			*		*			*					*	*			*		*
13	*	*				*				*	*	*	*	*	*			*	-
		*	-						*				*	*	-			*	-
16	*		*				*		*	*					*		*	*	
	*		*								*		*		*	*			
19							*	-						*		*		*	
		*				*				*				*				*	
323			*				*					*			*		*		
	*				*					*				*				*	

Table 36

other nodes relating to the percussion underlay are: time units 5, 11 and 15 are marked in seven cycles, 19 in nine, 23 in seven and 27 in five). Thus suggests a preference for symmetrical units or compounds of eight time units over adherence to the percussion pattern, especially as one can point to time unit 13, which fits into neither and still has a higher reading of ten than any in the second set. Such figures in any case need to be compared with patterns of melodic repetition and the positioning of cadential and other formulae, and these generally confirm the wide distribution of symmetrical sections. If we consider the remaining 34 cycles in the sample in the light of these various criteria we find that the 16 + 16 + 8 + 8 + 8 + 16 + 16 model suggested by 209 is approximated to in as many as a third,[146] while a further four are also in broad correspondence, being made up of larger spans (e.g. 16 + 24 + 32 + 16 in 4 H1) in which subdivision would be arbitrary. But that still leaves 19 cycles unaccounted for, and if the model were the standard template for darb-ı fetih one would expect a rather higher level of adherence to it. Some of the variety encountered can be gauged from the very first segment, which can be assessed variously at 6, 8, 10, 12, 14, 16, 18 or 20 time units in length. Especially problematic are 7 and 10, where the model only appears with any clarity in the final two sections of the latter. 7, in particular, is difficult to segment with any confidence: for H1, for example, one might suggest, as just one possibility, (6 + 8) + 14 + 16 + 14 + 14 + 16, and for M 8 + 8 + (20 + 16) + 20 + 16. Apart from the standard final cadential block of 16 neither can be related to the model, but nor do they bring us significantly closer, despite one or two points of contact, to the alternative template of the

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[146] 1 H1, Z and H3; 10 H3 and serbend; 13 H3; 16 H1 and Z; 19 M, H2 and H3. The correspondence is not always exact: there are one or two cases where a 16 in the model should better be viewed as 8 + 8, and vice versa.

percussion underlay, so that we are left with the uncomfortable paradox of the longest cycle of all allowing possibly the greatest degree of latitude in the placing of the various elements that make up its melodic texture: a particular pattern can be discerned with sufficient frequency to be regarded as a norm, but it is one that just as frequently drifts out of focus or disappears completely.

If we turn to formulaic usage it follows that we cannot necessarily expect to find a conventional siting of particular events at specified points in the cycle, but cursory examination suggests that by comparison with the cycles previously examined we certainly seem to encounter an equally widespread use of particular formulae. Reverting to the original sample of nine pieces with their total of 45 cycles, we may take as initial pointers (which could, incidentally, give some marginal help in segmenting the remainder) the incidence of the rising formula and the rising/falling fourth. The former occurs eleven times, being concentrated in two or three pieces where it tends to appear in a slightly abbreviated form at the beginning of the final block of 16, and the fact that it only occurs once at the beginning of a cycle (in 4 H1) provides a clear contrast with compositional preferences in sakil. The rising/falling fourth appears more frequently in the scalar form, but is generally varied so that it rarely comes down squarely on the initial pitch, either being arrested one step above or continuing beyond. Identification is, consequently, not always absolutely secure, but it is certainly more common than the rising formula, occurring at least 20 times, and although these tend to be scattered at various points in the cycle it is certainly not coincidental that there are five instances beginning at time unit 57, which marks the onset of the penultimate block of 16, so that they provide a parallel to the preferred positioning of the rising formula at the beginning of the final block. Taken together they suggest that the kind of formulaic language encountered in the other long cycles will be found to be equally pervasive here, and that within the darb-ı fetih corpus we will be able, as expected, to perceive a commonality of compositional tactics, even though they may often elude any parallel congruence of internal divisions. But if, both for comparative purposes and to render the amount of material manageable, we consider attempting to break the cycles down into small-scale elements (say, the equivalent of cells of four or at most six time units), the consequence of such variability is that we will be faced not only with the analytical problem encountered in fahte multiplied many times over, but also with accepting that in many cases an arbitrary choice will have to be made between alternative and equally convincing divisions in order to avoid a cycle appearing as a dense web of overlapping segments.

Exceptions are, however, provided by the very beginning and the very end. The latter is uniformly LLL, while in the former the following occur three or more times each:

LLL	6	LLR*x*	5	RFF	5
FRR	4	LLF	4	RRR	3

thus demonstrating, as one might expect, similarities with sakil, in which the initial cell provides a very similar profile. Within the remaining 80 time units virtually all the common formulae noted in other cycles for cells (or better, here, stretches) of four time units are to be found, and if the attempt were to be made to establish a list of the most frequent it would certainly have to include the following:

LLL
LFF
FFF
FRL
RRL
FFL

But there would be little point in attempting such a quantification. LLL, for example, may well be cell-like when it can be construed as forming a medial cadence, but not when it is the middle member of 𝅗𝅥 𝅗𝅥 𝅗𝅥 ; and it is quite common for LFF and FFF to overlap to produce the six-note formula LFFFF. Further, missing from such an inventory would be any indication of the increasing structural importance in darb-ı fetih cycles of repetitions, sequences and scalar passages. To take just one example, in 1 H3 the simple two-note cell R is sequentially repeated to form a descending scalar passage covering 20 time units, while in 4 H2 the repeated form RFR is used in exactly the same way over 32 time units.

Such passages imply the possibility of rhythmic regularity over long stretches, and in general, as with the sakil and havi repertoires, darb-ı fetih compositions appear remarkably uniform in the sense that there are few passages with rapid contrasts of duration between successive attacks. Further, subdivided time units are relatively rare, occupying, for example, a mere 3% of a randomly chosen sample of 1000 time units.[147] The remaining values found in the sample, ♪ ♩ ♩. and 𝅗𝅥 , occupy, respectively, 51.8%, 29.8%, 5.4% and 10% of the total duration, so that ♪ is much the most common, followed by ♩ , the two accounting between them for more than 80% of the whole.[148] In the light of this it is hardly surprising to find in 7 H2 40 instances of ♪ in unbroken succession, and in 17 H1 no fewer than 52.[149] In the original sample, taking again the first two cycles in each piece, the average number of pitch changes per cycle ranges from 61.5 in 209 to 76 in 19, and the global average of pitch changes per time unit is 0.75, so that in this respect darb-ı fetih aligns itself with, amongst others, sakil and muhammes.

So portrayed, the general characterics of darb-ı fetih as seen in the sample are also reflected quite faithfully in the remaining pieces, the formulaic language of which is demonstrably the same, so that detailed examination is not required. There are again a number where the internal structure of the cycles is, if not wayward, certainly elusive, although most conform if anything more closely to the predominant pattern of combined blocks of 16 and 8 first discerned in 209.[150] But none conforms as faithfully as the composition by Cantemir included in the original sample, 323, which, paradoxically, is at the same time the one that is structurally and stylistically the most distant from the remainder of the corpus, in part because of the very rigidity of its internal section divisions. With its juxtaposition of short bursts of subdivided time units with long-held pitches which, as noted elsewhere, have the effect of producing internal caesuras, it points to a very different compositional approach, one that eschews fluidity and a generally steady and sedate flow of pitch changes in favour of starker contrasts between dynamic and static areas. The regularity of the caesuras is such that it would be quite possible to scan most of its sections as being largely compounded of cycles of muhammes, many with emphatic end-closure, a single pitch being sustained over the last four time units.[151]

With this piece we have incontrovertibly moved into a different stylistic world where the perception of the cycle is radically new.

3.7 *Tempo*

Reference was made in Part i (pp. xxiv-xxv) to evidence for a distinction between two broad tempo bands (which are distinguished in the transcriptions by the choice of ♪ or 𝅘𝅥𝅯 to represent a time unit). The argument was based generally on code preferences and specifically on the code chosen for evsat, this then being assigned to a relatively fast group (transcribed, accordingly, with time unit = 𝅘𝅥𝅯) along with devr-i revan, semai-i lenk and fer'-i muhammes. For the first two of these exactly the same argument can be adduced, and with equal cogency: in both, the vezn-i asgar code is selected for pieces that could be represented equally efficiently by the vezn-i kebir code: there is no question of needing one code in order to render features (e.g. dotted rhythms) that the other could not handle. The choice therefore appears free, and interpretable as conveying tempo implications. However, the same does not hold for the three pieces in fer'-i muhammes, so that its assignment to the faster group requires some other and as yet unstated justification. But in addition to reconsidering the specific case of fer'-i muhammes there are a number of other issues that may usefully be taken into account under the rubric of tempo.

Some of these arise out of the evidence supplied by the *edvār* in the form of a hitherto disregarded leaf (pp. 133-4) inserted out of order among the indices. Blank on one side, it presents on the other a table of the rhythmic cycles giving their numerical representation in each of the three notational codes.[152] Thus the first entry, darb-ı fetih, is given, as expected, the number 88 in the vezn-i kebir column, to which correspond, straightforwardly, 176 in the vezn-i sagir column and 352 in vezn-i asgar us-sagir column. Most entries are equally uncontroversial,[153] and those for evsat, semai-i lenk[154] and devr-i revan appear to offer conclusive support for their being assigned to a fast group. Indeed, the first two are simply omitted from the vezn-i kebir column, their basic number of time units, 26 and 10 respectively, first appearing in the vezn-i sagir column, where the equivalent basic number for devr-i revan, 14, is similarly placed. We thus find here textual confirmation for the decision to opt for 1 = ♪ in the trancriptions of the earlier pieces in devr-i revan and semai-i lenk in the main vezn-i kebir block (where there is no indication of code), which was made by analogy with the later 283 and 335 (in devr-i revan) and 284 (in semai-i lenk), stated to be in vezn-i sagir, as are the evsat pieces.

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[147] Chosen arbitrarily as the first two cycles each of pieces 1-5 and in 6 the first cycle and the first 32 time units of the second.

[148] In 2, 8 and 209, for example, there is not a single subdivided time unit.

[149] This passage is also a good illustration of how, in the absence of durational markers, sequences can be used not merely as a propulsive compositional device but as a structuring mechanism: we are clearly invited to understand the rhythmic landscape as 4 + 4 + 4 + 4 + 16 + 8 + 4 + 4 + 4 + 4 (and therefore to opt for the upper of the alternatives offered from time unit 51).

[150] But those that do not are just as elusive as any in the sample. One might compare, say, 3, where only Z is clearly compounded of blocks of just 4, 8 and 16, with the square internal division of most cycles in 2 or 6. 2, for example, exhibits clearly demarcated internal sections of 16 and 8 (demonstrated e.g. in M by the use of the common cadential formula FRL at the end of the second block of 16, and with the fourth being a sequential repetition of the third).

[151] The only exception being H1, where the equally emphatic end-stopping of all segments save the second gives 8 + 8 + 8 + 12 + 8 + 12 + 8 + 8 + 8 + 8.

[152] It appears after the first page of the third index. Its original position was no doubt among the pages missing from the chapter on rhythm, and given that the other side is blank it may well have been the final one.

[153] The only anomaly being that instead of the initial 9 for evfer being followed by 18 and 36, we find 20 and 40. But rather than simply a crass blunder, the substitution of the higher figures may have been a deliberate attempt to reflect and somehow quantify the retardation that Cantemir refers to in the latter part of this cycle (see 3.3), and which he may have felt would led to too distorted a representation in the other codes if consistently ignored.

[154] Listed here as *semā'ī-i raḳḳāṣ*. The name is discussed below.

However, the entries for these three cycles are unexpectedly asymmetrical, thus raising interpretative problems that concern other cycles too, for instead of no entry, as with evsat and semai-i lenk, signalled by a cancelling line drawn through the first column, devr-i revan is given the entry 7. This is, on the face of it, exceedingly odd, for the obvious conclusion that Cantemir regarded devr-i revan as a cycle of 7 time units and also, by implication, one not, or certainly not necessarily, belonging to the faster group is refuted by his own definition (p. 83), which is of a cycle of 14. One way to make sense of the contradiction would be to assume that half of the devr-i revan cycle could be viewed as an autonomous entity, an attractive thought given that a number of pieces include (sub)sections made up of *x*-and-a-half cycles, and that one of these, 172, is indeed in devr-i revan. To this, however, it may be objected that there is no equivalent half value for, say, muhammes, where the same phenomenon occurs rather more often. Alternatively, and perhaps preferably, one might think that the mysterious 7 is simply meant to imply that were a cycle of devr-i revan to be written against the background of the tempo range most frequently associated with vezn-i kebir then assigning it seven time units in that range would reflect its faster tempo. As the rhythmic structure of a complete devr-i revan cycle could not be notated in the vezn-i kebir code within the framework of seven time units this could in any case only be a purely notional equivalence, but what really counts against this interpretation is, rather, that by the same logic one would expect to see vezn-i kebir entries of 13 and 5 for evsat and semai-i lenk respectively.[155]

There thus appears to be no one obvious and convincing interpretation of this unpredictable entry, so that it unfortunately fails to provide a reliable guide to the understanding of the other cases where there is something unusual or unexpected about the figure entered in the vezn-i kebir column. These are, in order of occurrence, 32 for havi, 24 for çenber, 16 for hafif, and 16 for fer'-i muhammes.[156] As far as havi is concerned, the general similarity to the

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[155] It should be noted that Cantemir is not alone in mentioning both 7 and 14 in relation to devr-i revan: both are also given in the mid-eighteenth century by Ḫıḍır Aġa. See the reprint of E. Neubauer, 'Der Essai sur la musique orientale von Charles Fonton mit Zeichnungen von Adanson', *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften*, 2, 1985, 277-324; 3, 1986, 335-76; reprinted with facsimile of the original manuscript and an appendix in Publications of the Institute for the History of Arabic-Islamic Science, The science of music in Islam, vol. 4, Frankfurt am Main: Institute for the History of Arabic-Islamic Science at the Johann Wolfgang Goethe University, 1999 (at p. 270). The first section of the appendix (*Zu den musikalischen Metren* (uṣūl), pp. 257-95) provides a comprehensive and most valuable survey of definitions including all the major eighteenth-century sources. As this reveals, however, Ḫıḍır Aġa is in the habit of giving alternative *x* and 2*x* totals, also for cycles where Cantemir starts with 2*x*, so the significance of his 7 for devr-i revan is not immediately obvious.

[156] So that according to this list there are no fewer than five cycles of 16 time units: hafif, muhammes, fer'-i muhammes, berefşan and frenkçin.

darb-ı fetih corpus exhibited by its three pieces, not only at the level of small-scale formulaic preferences but also, and more indicatively, at the level of concatenations of formulae, and the related fact that the average number of pitch changes per time unit aligns it with both darb-ı fetih and sakil, cycles which in any case share with it lengthy sections of percussion underlay, suggest strongly that it belonged with them to a segment of the repertoire with common tempo norms. Consequently, rather than interpret the 32 as placing havi in the fast group it seems better to regard it as indicating either Cantemir's perception of its structure or as suggesting that a half cycle could be thought of as a separate entity.

Neither conclusion is particularly attractive. The former runs up against the problem that although the 64 time-unit percussion underlay had to be supplied from a later source, everything points to this faithfully reflecting Cantemir's original definitions, but given the very regular (16 + 16) + (16 + 16) articulation of the cycles in all three pieces the latter might be entertained if viewed as relating primarily to melodic structure, and both have more to commend them than the final logical possibility, which is that 32 time units of melody notated in the vezn-i kebir code corresponded to the whole percussion pattern (which would therefore be moving not only at twice the speed of the melody but at twice the speed of the related percussion patterns in sakil and darb-ı fetih).

The situation with regard to hafif is broadly comparable, except that the suggestion of a half cycle being viewed as the unit to which the figure in the vezn-i kebir column relates is rendered a little more plausible by the fact that in addition to the undeniable 16 + 16 standard articulation of each cycle the corpus contains one instance, 187 H3b, of a subsection consisting of one-and-a-half cycles (of 32 time units).[157] As with havi, there do not seem to be good reasons for thinking that the 16 entry signals membership of the fast group.

With çenber we move in the opposite direction. The entry in the vezn-i kebir column is 24, but the corpus contains too many (sub)sections in which the total of time units is either 12 or 36 for this figure to be accepted without demur as the definition of the length of the cycle and, as has been noted in 3.2.1, confirmation that çenber is, indeed, a cycle of 12 is provided by the number of time units always allotted to it in pieces in zencir. The 24 entry aligns itself, however, with the diagrammatic presentation of this complex cycle, which likewise flouts the clear evidence of the notations by allotting 24 time units to the çenber segment, so that it appears to be proceeding at half the speed of the other constituent cycles. Although it is difficult to entertain the notion of the basic pulse fluctuating from cycle to cycle within zencir, the most likely interpretation of the insistence on 24 is that it indicates that the çenber repertoire was normally performed at the very slow end of the tempo spectrum.

For fer'-i muhammes, on the other hand, the entry in the vezn-i kebir column is a straightforward and unproblematic 16, the same as the total number of time units in his definition of the cycle (p. 93). What this calls into question is therefore not the structure of the cycle but the assumption made in the transcriptions that it belonged in the fast group together with devr-i revan, evsat and semai-i lenk. Of the three pieces in this cycle the first, 68, is not differentiated in any way by Cantemir from the surrounding block of pieces in vezn-i kebir, so that the transcription with 16/16 rather than 16/8 (i.e. as if it had been notated in vezn-i sagir) appears as it does as a result of editorial intervention, the justification for which is to be found in the other two, 329 and, especially, 336. These contain rhythmic subdivisions requiring notation with the vezn-i asgar us-sagir code, but with the durational values for the melody thus fixed the resulting subsection lengths are such that assigning the percussion underlay to the slow band (i.e. transferring it from 16/16 by 16/8) would result in no fewer than five subsections appearing to consist of x and a half cycles.[158] Further, the complete cycles would be atypical in having an extremely high ratio of pitch changes to time unit; and the transfer would also, incidentally, mean that the slightly varied percussion pattern of the first half of muhammes that forms fer'-i muhammes needs to be played at half its original tempo.

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[157] Feldman (op. cit., pp. 317, 384) accepts 16 as the cycle total, and transcribes 94 accordingly (pp. 443-4, where it is juxtaposed with Fonton's version).

The information conveyed by the list of time unit definitions is thus often difficult to interpret, and the readings proposed here are necessarily tentative. It might be hoped that the order of presentation would contribute to our understanding, but this is rather erratic, for although the general principle is to move from long to short, beginning therefore with darb-ı fetih, havi and sakil (which makes the 32 for havi, placed between 88 and 48, all the more curious), there are several anomalies. Perhaps rather more instructive in this respect is the list at the beginning of the rhythm chapter (p. 79), which again begins with darb-ı fetih, havi and sakil, but then proceeds hafif, türki darb, çenber, nim sakil and remel. This suggests more clearly a descending length order and implies a preference for 64 over 32 for havi, 32 over 16 for hafif, but 24 over 12 for çenber. There then follow muhammes, berefşan, evsat and devr-i kebir, which may be interpreted as suggesting for the 26 time units of evsat a tempo nearly twice as fast as that for the 14 time units of devr-i kebir, and similar tempo implications emerge from the next group of nim devir, fer'-i muhammes, devr-i revan, fahte, evfer and düyek. Here the placing of devr-i revan and, especially, fer'-i muhammes, points to their belonging to a significantly faster tempo band. After düyek comes sofyan, which is the natural next step, and then frenkçin, which is not: it begins a final miscellaneous group which proceeds through the complex cycles darbeyn and zencir to semai and, finally, semai-i lenk.

If we return now to the list of time unit definitions we again find frenkçin added almost as an afterthought beneath düyek (there is no entry for sofyan), thereby concluding the list of cycles used in the peşrev. We are then left with a further four entries of which the final one, hezec, is a later addition in another hand and may be disregarded. Of the others one, evfer, is specific to the vocal repertoire, and may also be passed over, but the entries for the remaining two, the semai cycles, require further discussion.

The first, *semā'ī-i raḳḳāṣ* ('the dancer's semai'),[159] is mentioned nowhere else in the *edvār*, and is a source of some confusion. Defined as a cycle of ten time units, it must surely be equated with the one that appears in the notations, but with the simple heading semai (i.e. with nothing to differentiate it from the more common semai cycle of six time units).

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[158] Even accepting the suggestion made in the discussion of 10. sipihr, which would allow H3b and even possibly H2b to be shorn of the final odd-numbered cycle, there would still remain three half cycles if the rhythmic cycle were renotated as 16/8.

[159] Usually read as *semā'ī-i raḳṣ* ('dance semai'), but the text has a doubling sign over the *ḳ*, which makes *raḳḳāṣ* preferable. The distinction is wholly trivial.

Appealing to later nomenclature, where the equivalent cycle of ten time units is termed aksak (= lenk) semai, this has been termed here semai-i lenk, and it has been assumed that the textual references in the *edvār* to semai-i lenk, including the controversial cyclical definition, also apply to this cycle. However, it is clear from Neubauer's detailed survey of sources[160] that other interpretations are also possible, including most obviously the restitution of Cantemir's cyclical definition of a semai-i lenk cycle of eight time units. This would, nevertheless, result in the anomaly that the collection of notations contained an obvious 10 time-unit ancestor of aksak semai = semai-i lenk, while semai-i lenk was used in the *edvār* to denote a cycle that was nowhere represented in the collection of notations. On balance, it still seems preferable to suspect misrepresentation in the cyclical definition, and as a conceivable if far-fetched alternative to (but also part confirmation of) the form used in the transcriptions, which assumes haplography (see 3.2.1), one might surmise that the unusual horizontal stroke added in the inner circle after the 2 of the first *tek*, presumably as an afterthought since there is no corresponding segment of the circle, was meant as a symbol of extension, pointing to the missing two time units. If so it would confirm the position suggested before for the necessary interpolation, and although it could be argued that it should suggest the absence of any extra percussion, so that instead of the previous emendation:

düm - düm tek - [tek -] düm tek -

we would have:

düm - düm tek - [- -] düm tek -

the resulting unprecedented absence of a percussion corresponding to the onset of the second half of the cycle points if anything to it being more reliably interpreted as a repeat sign, thus restoring the hypothetical *tek*.

In any event, it may be noted that the term *semā'ī-i raḳḳāṣ* in the numerical list (for whichever version of this cycle is preferred) is paralleled in its unusual functional reference to dancing by the equally unusual term for the remaining cycle, *semā'ī-i ḥarbī* ('military semai'). This also has no entry in the first column, but in the second we find 12 rather than the expected 6, so that it does not necessarily follow that whatever segment of the semai repertoire was meant by this designation belonged to the fast group. To the question of why there is no corresponding 6 in the first column no convincing answer presents itself, although one possibility is that mehter musicians favoured a particular percussion pattern for semai pieces that extended over two cycles of the melody before repeating.[161]

However inconclusive, the above discussion leaves the notion of contrastive tempo bands intact. Whether or not occupying a place apart, çenber seems to be marked as a particularly slow cycle, and it is possible to infer from the order in which cycles are listed that some of the faster ones might habitually have been played at something approaching twice the speed of the slower ones. But rather than imply that a given cycle would always inhabit one of two rigidly maintained and clearly discrete tempo zones, it still seems prudent to characterize the differentiation between them as a trend towards relatively slower and faster, especially in the context of a presumed (and possibly considerable) degree of flexibility in the tempo at which any given composition could be performed. But if it may not be appropriate to think of an ideal metronome mark for any given piece or rhythmic cycle, there is still some evidence to consider that may help give a general guide, and it is also instructive to consider twentieth-century (and presumably still current) views of suitable tempi for pieces from the collection.

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[160] op. cit., pp. 271-4.

[161] However, this is not a notion entertained by the expert on mehter music, Sanal, who includes a number of semais notated as 6/8 as against only one deemed to be a *semā'ī-i ḥarbī* (op. cit., pp. 185-6) and notated as 12/8. It may be suggested that the reason for this classification is the prevalence of fanfare material in the melody: the piece is in rehavi, and, as has been noted, fanfare material is constitutive of its modal identity, being ironically reminiscent for Cantemir of Western trumpet motifs. But whatever the reason, the notation has to revert to 6/8 in H3, which has an odd number of cycles in both subsections.

The major seventeenth-century control is, of course, the notational practice of ʻAlī Ufḳī, who usually shows a clear preference in most cycles for either 𝅗𝅥 or ♩ as the equivalent of Cantemir's 1. Considering first those cycles where there are more than one or two pieces common to both collections, we have the following:

berefşan	1 = 𝅗𝅥[162]
darb-ı fetih	1 = ♩[163]
fahte	1 = 𝅗𝅥[164]
sakil	1 = ♩[165]
semai	1 = ♩[166]

In other cases he uses both, but with a decided preference:

devr-i kebir	1 = 𝅗𝅥[167]
düyek	1 = ♩[168]

The other cycles provide fewer examples and are therefore less telling as evidence, but one may nevertheless note the use of 1 = 𝅗𝅥 in darbeyn[169] (as expected, since it combines devr-i kebir and berefşan) and zencir,[170] and of 1 = ♩ in devr-i revan[171] and havi,[172] while çenber and

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162 There are four pieces: 44, 49, 167 and 306.

163 There are 16 pieces: 3-7, 9-16, 18, 19 and 21.

164 There are seven pieces: 22, 32, 58, 60-2 and 149.

165 There are 14 pieces: 78, 113, 127, 129, 142, 143, 145, 146, 160, 202, 208, 307, 317 and 346.

166 There are seven pieces: 243, 246, 247, 249, 253, 261 and 273. 1 = ♩ is also used for the semai section of 73 (değişme) as against the 1 = 𝅗𝅥 of the remainder.

167 In 13 cases (52, 54-6, 81, 95, 119, 120, 122, 158, 174, 201 and 322), as against 1 = ♩ in two (41 and 118).

168 In 31 cases (25, 27, 34, 35, 37, 69, 71, 75, 85-8, 90, 106, 107, 112, 115, 132, 138, 164, 169, 176, 183, 196, 210, 276, 287, 295, 299, 326 and 341) as against 1 = 𝅗𝅥 in five (29, 30, 177, 223 and 327) and 1 = ♪ in one (318).

169 There are two examples, 151 and 154.

170 There is just one example, 108.

171 There is just one example, 170.

172 There is just one example, 150.

hafif are divided between them.[173] In muhammes there is one clear case of 1 = ♩, but the other pieces the two have in common that Cantemir assigns to this cycle are generally assigned by ʻAlī Ufḳī to others.[174]

These correspondences suggests a slightly different banding, with the longer cycles, darb-ı fetih, sakil and possibly also havi, coming together with düyek, semai and possibly devr-i revan to form a group for which 1 = ♩ points to a rather brisker tempo than the more sedate 1 = 𝅗𝅥 preferred for berefşan, darbeyn, fahte, devr-i kebir and zencir. Given the problems discussed above in relation to çenber and hafif it is a pity that ʻAlī Ufḳī's versions are split between the two, but it may at least be noted that for each 1 = 𝅗𝅥 is preferred in two pieces out of three, so that while one cannot find here evidence to support the argument that çenber was normally very slow, there is equally nothing to suggest that hafif might have been relatively quick.

Given the broadly similar melodic surface of the pieces notated by both there is nothing to point to retardation being a significant factor for most of the second half of the seventeenth century. Consequently, whatever can be inferred about tempo from ʻAlī Ufḳī's notational preferences may also be considered valid for Cantemir's collection. In general, the normal symbol for a single beat in seventeenth-century practice (i.e. the equivalent of Cantemir's 1 in vezn-i kebir) was a minim, the tempo implication of which was, as stated by Mersenne, that of a heart-beat,[175] and the pulse is also the foundation of the tempo indications given by later authorities such as Simpson and Quantz, from which it follows that the appropriate metronome setting would be somewhere in the range 𝅗𝅥 (= 1) = 70-80,[176] and it seems eminently reasonable to think of this as an acceptable middle-of-the-road tempo for pieces in such cycles as berefşan, darbeyn, devr-i kebir and fahte. Given the relative paucity of subdivided time units in the longer cycles it is quite likely, as is implied by ʻAlī Ufḳī's standard 1 = ♩, that the normal tempo for these was somewhat quicker, but it was presumably only with the cycles in the fast group that normal tempi would approach or equal twice the speed of the slower cycles. Accordingly, one might derive from the above discussion the following very tentative suggestions for approximate tempo zones, always bearing in mind that for the same piece the tempo might well have varied somewhat from performance to performance:

1 =	c. 60-80	çenber
	c. 70-100	berefşan, darbeyn, devr-i kebir, fahte, zencir
	c. 90-140	darb-ı fetih, düyek, hafif, havi, muhammes, sakil
	c. 120-200	devr-i revan, evsat, ferʻ-i muhammes, semai, semai-i lenk

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173 In the former there are two examples with 1 = 𝅗𝅥, 140 and 192, and one, 96, with 1 = ♩. Common to both is also 77, with 1 = ♩, but it is assigned by ʻAlī Ufḳī to düyek. In the latter there are two examples with 1 = 𝅗𝅥, 114 and 205, and one, 203, with 1 = ♩.

174 The one unequivocal case is 82. 137 and 316 (1 = ♩) are assigned to düyek, and 292 (1 = ♪) to ferʻ. Given such disagreement it cannot necessarily be assumed that the other common piece, 70 (1 = ♩), which has no heading in ʻAlī Ufḳī's collection, would have been assigned by him to muhammes.

175 See A. Dolmetsch, *The interpretation of the music of the seventeenth and eighteenth centuries*, Seattle and London: Washington University Press, 1969, p. 28.

176 ibid., pp. 31, 35-6.

For the remaining cycles, frenkçin, nim sakil, remel and sofyan, there is insufficient information to assign them with any confidence to one group or another. But there is at least one clue, for if we consider the average pitch-change rates per time unit in the various cycles in relation to the tempo bands that have been proposed we find, not unexpectedly, a certain correlation. Thus the cycles with the lowest rates, devr-i revan, evsat and semai-i lenk are in the fastest band, while the cycles with the highest rates, çenber and devr-i kebir, are in the two lowest bands. This is not meant to suggest that there was a single standard level of melodic density in performance throughout the repertoire, but that there was rather more conformity than the notations might suggest if divorced from any notion of comparative tempo. Against this background the low average number of pitch changes in the pieces in frenkçin and sofyan would suggest a place in the fastest or second fastest tempo band,[177] and for nim sakil and remel one in the second or third.

The principal modern scholars who have added metronome marks to their transcriptions are Ezgi and Sanal. From Ezgi (references in Part i) we have:

45	berefşan	1 = 126
98	çenber	1 = 62
166	fahte	1 = 116
170	devr-i revan	1 = 160
173	zencir	1 = 116
308	nim sakil	1 = 80
337	evsat	1 = 138

Those for çenber, devr-i revan and evsat thus accord with the suggestions made above, while those for berefşan, fahte and zencir are somewhat faster.

Sanal, in contrast, supplies tempi that are not just somewhat faster but dramatically faster. He transcribes considerably more pieces, so that there is usually more than one piece in a given cycle, and it is striking to note that the tempi suggested for them (references again in Part i) may vary considerably:

99	berefşan	1 = 208
96, 97, 98	çenber	1 = 168
54	devr-i kebir	1 = 180
301/299/223/25, 287, 293, 305/ 90, 169, 282, 295	düyek	1 = 124/182/208/240/ 256
58, 61/32	fahte	1 = 160/204
94/145/225/288	hafif	1 = 160/186/196/200
292	muhammes	1 = 224
42, 159	sakil	1 = 208
242/264/245/237, 246, 251, 259/ 247, 263/243/253	semai	1 = 196/208/240/288/ 360/408/450
270	semai-i lenk	1 = 360

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[177] Although it is appropriate to recall the association of 200, in sofyan, with çenber, which would point in the other direction.

No doubt one factor behind the much faster tempi proposed here is the perception that all these pieces belong to the mehter repertoire, so that there may be an implied military briskness or ceremonial exuberance as contrasted with what might be thought of as the sedentary langour of Ezgi's tempi, let alone the extreme sluggishness of what has been suggested here. There are, nevertheless, certain resemblances of proportion: it is interesting to note that for Sanal the slowest cycle is, on average, çenber, followed by devr-i kebir, hafif, fahte, berefşan and sakil, while the fastest are semai and semai-i lenk. But however much more convincing Ezgi's and/or Sanal's tempi may be felt to be, in neither case is any justification provided for the particular metronome mark proposed, and some of their indications do seem to be at odds with what little historical evidence there is. The latter's perception that one düyek piece might be suitably performed at more than twice the speed of another may be reminiscent of the notion of the melody moving in different gears,[178] but it is difficult to regard the decision to set a tempo of 1 = 450 for one semai when another has 1 = 196 as other than arbitrary. Their proposals, in sum, are fascinating and instructive, and if they cannot be regarded as definitive judgements on late seventeenth-century norms that is because they do not claim to be: representing the judgement of scholars with an intimate knowledge of tradition and its transmission, they are nevertheless conceived in the context of twentieth-century performance practice.

Equally fascinating and instructive are the contrasts between the tempi suggested by Ezgi and Sanal for pieces that have been exhumed after having long fallen by the wayside and those reported for similar pieces that have survived in the repertoire, albeit often transformed through aural transmission almost out of recognition. In illustration one may mention just one, 190: in devr-i kebir, a cycle for which a seventeenth-century tempo of 1 = 70-90 has been tentatively suggested and for a piece in which Sanal has proposed 1 = 180, this particular composition has survived in the Mevlevi repertoire, and the tempo indicated for its early twentieth-century form is 1 = 22.

We see here the results of a process of retardation for the onset of which Cantemir himself provides evidence,[179] although to pursue its course further would involve a much wider study of transmission. But while this lies outside the scope of the present work there still remain to be considered briefly certain related aspects of historical change as manifested within the contents of Cantemir's collection.

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[178] Although the four düyek pieces to which the fastest tempo is accorded are hardly prime candidates for the slow gear category: 282 and 295, in fact, are among those with the greatest number of subdivided time units.

[179] Both in the greater melodic density of the late pieces in the collection, including some of his own, and in the explicit textual reference in the *edvār* (p. 15, passage translated in Feldman, op. cit., pp. 332-3) to a very slow performance style that was sometimes used resulting in a halving of the tempo (although the unit referred to, oddly, is not a whole piece or even a whole section but a terkib).

Postlude

4.1 *Introduction*

In previous sections each block of material that has a particular modal or rhythmic label was regarded as a single entity. Given that whatever internal lines of cleavage might be detected within these blocks had not been conceptually recognized within the culture by terminological distinctions, the presumption was, and surely must be, of an overriding emic perception of unity, and analysis therefore concentrated on examining the nature of the common elements they exhibit. Indeed, this approach was carried further by trying to discern and describe underlying strategies and rules that all adhered to. But while it seems perfectly justifiable to look at the collection as an undifferentiated whole in the sense that it records the instrumental repertoires of a number of musicians located in a particular time and place, the unspoken ascription to it of a vague synchronic integrity was no more than a necessary precondition to the search for generally valid structures and processes. It invalidates neither the search nor its findings to recognize this for the procedural assumption it is, rather than to leave it as an unstated given that threatens to assume the status of an unquestioned conclusion. Indeed, when discussing individual modes or rhythmic cycles it has frequently been noted that in certain respects the corpus is lacking in uniformity, and although the internal differences point to variation along more than one axis, the predominant note was that of temporal change. Thus a number of incidental suggestions were made about the relative chronology of variations in pitch set in certain modes, and attention was drawn in the course of the discussion of individual rhythmic cycles to contrasting patterns that point to stylistic change and innovation.

Fundamental to the more general temporal contextualization of such features is Feldman's broadly based study of the Ottoman court music tradition, and no attempt will be made within the essentially seventeenth-century confines of the present work to venture onto the wider terrain so ably explored there of developments from Cantemir's day down to the nineteenth century. Even if much remains obscure, for the eighteenth century it is possible to consult works of a theoretical nature (for example those by Ḫıḍır Aġa,[1] Arutin,[2] and ‘Abd ül-Bāḳī[3]), further corpora of notation (by Kevs̱erī[4] and ‘Abd ül-Bāḳī), and instructive accounts by foreign observers (in particular Fonton,[5] Sulzer[6] and Toderini[7]); and in addition Feldman draws upon historical, literary,[8] and iconographical sources to supply a more than adequate account of relevant changes in other parameters. He explores such areas as the social identity of performers, the importance of the Sufi orders, the role of minorities, and performance context, and discusses, further, the varying levels of importance attached to specific instruments, their rise and decline, and the technical changes that affected them. Such aspects will not be considered further here, and as little would be gained by summarizing his general account of eighteenth-century developments in mode, form and repertoire, or Neubauer's comprehensive and detailed survey of rhythmic cycle definitions,[9] the focus will remain on the collection itself and the extent to which the evidence of internal differentiation it provides is not only indicative of variations of genre and style but can also serve as a diachronic index in relation to developments from the middle of the seventeenth century down to the beginning of the eighteenth.

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[1] *tefhīm ül-maḳāmāt fī tevlīd il-neġamāt*, MS Topkapı H 1793.

[2] Tamburist Arutin, *Rukovodstvo po vostochnoi muzyke* (tr. N.K. Tagmizyan), Erevan: Izdatel'svo AN Armianskoi SSR, 1968.

[3] ‘Abd ül-Bāḳī Nāṣır Dede, *taḥrīriyye* (1794), MS Süleymâniye Kütüphanesi, Nâfiz Paşa, 1242; *tedḳīḳ ve-taḥḳīḳ*, MS İstanbul Üniversitesi Kütüphanesi T 5572; Topkapı Saray Kütüphanesi Emanet Hazinesi 2069.

[4] The manuscript is in private hands and remains unpublished (for a description see E. Popescu-Judetz, *XVIII. yüzyıl yazmalarından Kevserî mecmuası üstüne karşılaştırmalı bir inceleme*, Istanbul: Pan Yayıncılık, 1998). However, one piece not copied from the Cantemir collection has been transcribed in Rauf Yekta Bey, 'Musique orientale. Le compositeur du *Péchrev* dans le mode *Nihavend*', *La Revue musicale*, 7, 1907, pp. 117-21, T.T. Burada ('Scrierile muzicale ale lui Dimitrie Cantemir', *Ananele Academiei Române*, 32, 1909, pp. 45-52, E. Popescu-Judetz, *Dimitrie Cantemir: cartea ştinţei muzicii*, Bucharest: Editura Musicala, 1973, pp. 329-32, İ.B. Sürelsan, *Dimitrie Cantemir (1673-1723)*, Ankara: Türk Millî Komisyonu, 1975 (at pp. 95-101, with a reproduction of the original), and Feldman, op. cit., 449-59.

[5] C. Fonton, *Essai sur la Musique Orientale comparée à la musique européenne*, in E. Neubauer, 'Der Essai sur la Musique Orientale von Charles Fonton mit Zeichnungen von Adanson', *Zeitschrift für Geschichte der arabisch-islamischen Wissenschaften*, 2, 1985, 277-324; 3, 1986, 335-76; reprinted with facsimile of the original manuscript and an appendix as Publications of the Institute for the History of Arabic-Islamic Science, The science of music in Islam, vol. 4, Frankfurt am Main: Institute for the History of Arabic-Islamic Science at the Johann Wolfgang Goethe University, 1999.

[6] F.J. Sulzer, *Geschichte des transalpanischen Daciens*, Vienna, 1781.

[7] G.B. Toderini, *Letteratura turchesca*, vol. 1, Venice, 1787.

[8] For example the important biographical dictionary by Şeyhülislâm Es‘ad Efendi, *aṭrab ul-ās̱ār fī teẕkirati 'urefā' il-edvār* (ca 1725), MS Istanbul Üniversitesi Kütüphanesi T.V. 1739.

[9] In the appendix to the 1999 edition of Fonton (see fn. 5), pp. 257-95.

4.2 *Form*

Given the more than extensive treatment of mode and rhythm in the previous sections it must come as an immense relief as well as something of a surprise to find that it is not to be followed by a comparably detailed treatment of form. But in contrast to the great modal and rhythmic variety to be found within the corpus the most immediate impression it conveys with regard to formal structures is of standardization. Although different categories were recognized, they share the same internal structure, being made up of a sequence of large-scale internal divisions, the great majority termed hane (H) and mülâzime (M), and what variations there are can perhaps most profitably be examined, following Feldman's lead, as potential indicators of difference in either function, place or time.

4.2.1 *Peşrev and semai*

Even the one broad category distinction made in the collection, the separating off of the main block of semai pieces from the preceding peşrevs, fails to relate to any discernible formal criterion. In terms of purely musical parameters it is based on nothing more than the presence or absence of particular rhythmic cycles, pieces in semai and semai-i lenk being placed in one camp, the remainder in the other;[10] and as there is no formal distinction involved the perception that they fall into distinct categories must have a different cause, the most obvious possibilities being function and provenance. What is at least clear from Cantemir's organization of material is a straightforward hierarchical distinction, precedence being given to the peşrevs (and the peşrevs themselves, it may be added, are also partly organized according to hierarchical notions, with the darb-ı fetih pieces coming first, then the külliyat, then the remainder), although it is also relevant to add the obvious point that the order also reflects the normal sequence of events in performance. However, the geographical area to which the semai and cognate rhythmic cycles can now be related suggests for it, from the perspective of Istanbul, an Anatolian origin, and in Cantemir's day it could well have still been understood, despite its association with the Mevlevi rite, as in essence a provincial genre.[11] But even if we can locate here an adequate explanation of why the semai should have been viewed as in some sense secondary, it is one that does not quite account for the degree of literal marginality indicated by Cantemir's omission of the semai corpus from his first and second indexes, so that semai entries only appear as an almost grudging afterthought added around the main body of the third index. Such offhandedness is reinforced by the fact that, in contradistinction to the peşrev corpus, very few semai notations have the name of the composer included in the heading; and as a final indication of relative status one may recall that in both lists of rhythmic cycles semai and semai-i lenk are relegated to the end.

But whatever associations it may have had, and whatever the perception of its origins, it is important to stress that the semai had already been incorporated into the large-scale secular cyclical form, the fasıl; it was also integrated into the sacred Mevlevi ayin (a process that had possibly taken place even earlier); and following Sanal we may accept that it had also become a standard part of the military and ceremonial mehter repertoire.[12] These provided the larger contexts within which both forms appeared. The component parts of the fasıl have been listed in 1.3.2,[13] and all that needs to be repeated here is the fact that the semai always followed the peşrev, either immediately, in the instrumental form, where it was at the same time the final item, or, in the more complex combined vocal and instrumental form, after the main intercalated block of vocal compositions (the last of which was also a semai) and immediately preceding the final vocal taksim. The placing of the semai as the final piece composed in a fixed rhythmic cycle is common to the ayin as well.[14]

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[10] Only in 73 and 130 are the two combined, and in both cases it is in the final hane that the semai rhythmic cycle appears. Also to be noted is 268, where both (and only) semai and semai-i lenk appear, H1 and M in the latter, H2 and H3 in the former.

[11] A conclusion based on Feldman's researches (op. cit., pp. 461-3).

4.2.2 *Hane and mülâzime*

The principal formal patterns that occur (in both peşrev and semai categories) have been described in the Introduction to Part i. The underlying structure is in every case that of alternating sections, one a ritornello, the others differing not only from the ritornello but also from each other. In the great majority of pieces the ritornello comes second, and is termed *mülâzime* (M), while in the remainder it comes first, in which case it is generally called simply 'first section' (*serhane/hane-i evvel* = H1).[15] We thus have the following arrangements for the standard case of a piece with three hanes:

type 1	H1	M	H2	M	H3	M	
type 2		H1	H2	H1	H3	H1	

so that type 2 is identical to the first minus its first section. Among the much smaller number of type 2 pieces[16] there are one or two that are extremely short, but it is clear that as a group they are not simply a shorter form of peşrev in terms of performance time.[17] The difference

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[12] Interesting in this respect is 245, which Sanal (op. cit., pp. 185-6) assigns to the mehter repertoire, while in the margin of the manuscript there is a reference to Sultan Veled, presumably to be understood as associating the piece with the Mevlevi tradition. A further possible general association that may be mentioned is of the semai-i lenk cycle with dance (see 3.7).

[13] See also Feldman, op. cit., pp. 180-1, which includes a translation of Cantemir's description of the vocal and instrumental fasıl. Also to be noted is a reference by Evliya Çelebi (Sanal, op. cit., p. 16 fn.) to fasıl as a term used in the context of mehter performances.

[14] In the course of a careful discussion of early developments, Feldman (op. cit. pp. 187-92) makes useful comparisons between the ayin and the fasıl, and suggests both that the ayin, at least in embryonic form, may antedate the emergence of the fasıl and that the secular form of the semai (the very name of which has Sufi associations) was probably borrowed from it. However, it is important to bear in mind that there is a crucial lack of documentation for the early stages in the development of the ayin (cf. Feldman's own cautious remarks on p. 97 about the implications for function of tempo changes in the introductory peşrev).

[15] Thus second type is virtually confined to peşrevs: the only semai to be so structured is 266.

[16] There are 17 in all: 50, 68, 80, 100, 101, 102, 111, 141, 173, 228, 230, 281, 283, 286, 287, 297 and 316.

[17] The shortest in performance would probably be the first, 50, in berefşan, which with a maximum total (if all (sub)sections are repeated on every possible occasion) of 20 cycles contains 320 time units and at a tempo of 1 = 80 would have a playing time of four minutes; and the second, 68, in fer'-i muhammes, which with a maximum total (if all (sub)sections are repeated on every possible occasion) of 38 cycles contains 608 time units and at a tempo of 1 = 160 would have a playing time of 3'50". But at the same tempo a performance of 283 would take twice as long, while one of 281, also in berefşan, would have a maximum playing time, even if H1c were never repeated, of more than three times that of 50 if taken at the same tempo, comfortably more than several peşrevs of type 1.

between the two is further diminished by the fact that in many pieces of type 1 H1 is relatively brief, so that adding it to the ritornello would hardly upset the proportions of the whole. In 155, for example, H1 consists of just one cycle, M of two, and as the remaining sections contain between them four cycles it is clear that an expanded ritornello including H1 would still dominate the whole less than that of 50, the first example of type 2, in which H1 is as long as the other sections combined. In 49, on the other hand, H1 consists of just one cycle, M of eleven, and as the remaining sections contain between them only eight cycles it is clear that the ritornello already dominates even more than in 50. That H1 was on occasion absorbed into the ritornello is demonstrated by the fact that 287 and 316 both had a mülâzime in the form in which they were recorded by 'Alī Ufḳī, and the two sections subsequently fused to form a larger composite one, thus transferring these pieces to Cantemir's type 2 group.[18] As none of the other members of this group appear in the 'Alī Ufḳī collection it is reasonable to regard the type 2 structure as an innovation of the second half of the seventeenth century or, perhaps more accurately, a cultural borrowing.[19] Four of the 17 pieces are labelled *'acemī*, and when describing it Cantemir expressedly relates it to Persian instrumentalists (*'acem sazendeler*).[20] However, although it was also taken up by Ottoman composers, it was to remain marginal, and never seriously challenged the supremacy of type 1: among Cantemir's own pieces there is just one example, 281.[21]

In both types it is possible to extend the format by adding a fourth hane, but examples are so few that it does not seem necessary to regard this as a separate category.[22] The collection is thus dominated by pieces of type 1, that is, by one large-scale formal shape consisting of three sections each followed by a ritornello. The resulting lack of large-scale formal variety need occasion no surprise, especially given the rhythmic and modal complexities of the various pieces that a competent performer needed to master, for it could be argued that if compositions were also cast in a wide variety of forms the task of memorization would be excessive, and that a high degree of predictability, simplicity even, was required in at least one structural domain. But the fact remains that the seemingly uniform framework of type 1 still leaves ample scope for variation both in relative proportions and patterns of internal repetition.

In terms of sheer length, for example, one might contrast, among the peşrevs, 94, with a possible maximum of 18 hafif cycles and, at a tempo of 1 = 120, a performance time of a little under five minutes, with 30, which at the same tempo would last twice as long, or 93, which with all repeats would have a performance time, again at the same tempo, of almost 15 minutes, and would in turn be dwarfed by 140, in çenber, which at 1 = 80 would weigh in at a massive 22 minutes. At the other end of the scale one could also quote, among the semais, 244, which at 1 = 144 would be over in exactly two minutes.

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[18] A further, but incomplete and therefore possibly transitional, example is provided by 140, in which the last eight of the eleven cycles of M1 in the 'Alī Ufḳī version have been transferred to M.

[19] Feldman reaches the same conclusion (op. cit., p. 363.)

[20] The passage in question is translated by Feldman (op. cit., pp. 319), who also refers to the four *'acemī* examples (p. 315) as a possible excursion into the 'quasi-folkloristic'.

[21] There is also one example among the four pieces in the collection by his teacher, Angeli.

[22] Of the six pieces in question two, 23 and 296, belong to the special külliyat category, where H4 fundamentally allows more space so that further modulations can be included, while a third, 73 (değişme), may be viewed as a rhythmic analogue to the modal külliyat, H4 thus allowing the inclusion of yet another change of rhythmic cycle. Of the others, 287, 293 and 308, the first belongs to type 2.

Although not quite as dramatic, there are also significant differences to be observed in the relative length of the various sections. A basic shape, exemplified in 179, is M>H1, H2, H3. Although in this particular case all three hanes are equal in length there is normally some variation, so that in 180 M>H3>H1, H2, in 183 M>H3>H2>H1, in 184 M>H2>H3>H1. But even if this is the most common profile it is not always the case that M is the longest section and H1 the shortest: in 187 H3>H1, M, H2, in 192 H1, M, H2>H3, and in 193 either H2>H1>M, H3 or, possibly, H1>M, H2, H3 (these alternative analyses depend on differing views of the status of repeated material).

Also related to the length of sections is another dimension of variability and complexity, that of the smaller-scale patterns of subsection divisions and repetitions within them. There seem to be no good grounds for examining and quantifying the incidence of variation in the number of subsections in isolation as a separate structural parameter; rather, it might be profitable to regard it as yet another aspect of compositional practice that could potentially reflect (and hence eventually contribute towards detecting) discrete strata within the corpus. There are, however, areas of considerable regularity, above all in the pieces in the longest cycle, darb-ı fetih, which invariably follow a pattern of one rhythmic cycle per section, so that their form, from a diachronic perspective, is quite opaque. With havi and zencir we move towards a norm of having at least some sections divided into two subsections (each consisting of one cycle);[23] and with sakil we may encounter more subsections (four in 92 M), or subsections with more than one cycle (two in 89 Mb, three in 93 H2a). But it is, in effect, only in the shorter rhythmic cycles that we encounter sufficient variety to be able to draw certain conclusions.

Sometimes there is no subdivision of sections in these cycles, but it is common to find two or three. On occasion the number rises to five or six, and there are even instances of seven or eight with, as a result, not only considerable differences in the length of sections but also in their internal patterns of repetition. Such variations occur both among the pieces that had also been recorded by ʻAlī Ufḳī and among those datable to the end of the century,[24] but it is possible nevertheless to detect a gradual trend, namely, with one significant exception, towards fewer and longer subsections. The exception is H1, which develops differently: it will have certainly fewer subsections, indeed it will generally be undivided, but at the same time it will become shorter rather than longer, so that even if it is not, as in type 2, absorbed into the ritornello, it tends to become more frequently a perfunctory exposition of the basic elements of the makam, leaving the now much longer M as the main focus of modal development before the contrastive transition to H2. Again, it needs to be said that this kind of relationship is not a wholly new phenomenon, and precedents can be found among the ʻAlī

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[23] Only 109, in zencir, adheres to the one cycle per section pattern (although the same is true of 173, also in zencir, which belongs to type 2, and consists therefore of only three cycles).

[24] One may compare, among the pieces also in ʻAlī Ufḳī, 25, which has two subsections in H1, five in M, two in H2 and three in H3, and 327, where eight subsections are recognized in M, with later ones such as 328, with three or four subsections in M, two in H2 and three in H3, or 279, by Cantemir, with three in H1, five in M, two in H2 and three in H3.

Ufḳī pieces.[25] What can be observed is not so much innovation as change of emphasis and differing preferences, the main result in this case being a perceptible shift of emphasis away from brief and sometimes multiple subsections and, concomitantly, towards different internal formal patterns, and it is to these that we may now turn.

4.2.3 *teslim and terkib-i intikal*

Of the remaining terms that relate to aspects of form the different and overlapping uses of teslim and terkib-i intikal (and also the much rarer *eyḍan*) have already been mentioned in the Introduction to Part i (pp. xxiii and xxv). Of interest here is not the substitution of one term for the other in the later part of the collection, but the predominant form of repetition to which they both relate. This sometimes has a clearly integrative function, as for example in 159, where we find teslim used to designate the repetition of Ma after Mb and likewise the repetition of Mb at the end of H2. But integration does not mean supplying repetition where it had hitherto been lacking, for even without the reintroduction of these subsections the piece is made up of a dense network of interlocking parts. If each sakil cycle is represented as an assemblage of eight blocks of eight time units each, and the various recurring formulae are symbolized by C (cycle-final cadence), c (medial cadence), S (rising scale) and 4 (rising/falling fourth), we have:

H1	—	—	4	—	4'	C
Ma	4'	—	—	—	4'	C
Mb	S	c1	—	4"	4'	C
H2	S'	c1	—	4	4	—
H3	—	c2	4	c2	—	C

Figure 1

and with the standard reiteration of Ma and b after H2 and H3 it is clear that 159 is already saturated with recurrence. In such a context, therefore, what is integrated by the first teslim, the return to Ma after Mb, is the symmetrical curve of the whole modal development within the confines of the ritornello, so that the high-register development of Mb that prefigures H2 is followed by the re-establishment of the lower register. The second teslim, the return to Mb after H2, is most probably a punning replay of the same material designed to give greater prominence to the high-register area, but is conceivably to be understood as indicating that this was the only part of the ritornello to be played between H2 and H3 (thereby making clearer the shift of emphasis from *d* to *e*). Whichever interpretation is preferred, it may be suggested that the significance of such large-scale repetition is formal in the sense of a shaping of the narrative course of events by enfolding within the ritornello, and therefore displaying again, each time it reappears, the essential trajectory of the whole piece from exposition through various modal peripetaia to a final resolution that is at the same time a reassertion of origin.

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[25] In 32, where H1 consists essentially of just two cycles repeated with a slight final variation while M, made up of three subsections, consists of ten, and even more strikingly in 49, where H1 consists of no more than a single introductory berefşan cycle that moves from *A*, the eventual finalis, to *f*, the first prominent note, as contrasted with the eleven cycles of the two subsections of M.

In other instances such condensation of the overall narrative is harder to detect. The very next piece is a case in point, and it is interesting to observe that the return to Ma, giving exactly the same structure to M as in 159, is lacking in the ʻAlī Ufḳī version. But 161 is again closer to 159, the repetition providing M with an overall arch form, and even if this particular contour does not always ensue something of the same dynamic attaches to the resulting *aba* shape.[26] A slightly different pattern, but still an aspect of the same phenomenon, is found in those pieces where the terminology has changed from teslim (now generally confined to prima/seconda volta variants) to terkib-i intikal, for here it tends, as in 311, 313 and 337, to relate to just the final part of Ma (containing, therefore, the finalis), which is then reintroduced to terminate not only Mb but also H2 and H3, thus introducing a new micro ritornello within and beyond the confines of M.[27]

Although it should not be claimed that such pieces are necessarily radically different in structure from those in which M appears as a succession of short repeated phrases, they do appear to represent a move away from an earlier method of organizing material. This may exhibit just as much internal cohesion, as in 327, where, taking eight time-unit (one cycle) blocks as in fig. 1, M may be represented as:

Ma		aa	aa	a-	bc (= C)
b				dd'	bc
c				ef	bc
d				e'f	bc
e				bg	bc
f	bg'	-h	g-	-h	bc
g		ij	4k	S	lm
		ij	4k		
h				i'-	l'm

Figure 2

but although an even higher proportion than before consists of repetition, there is no similar sense of cyclic return: in the longer subsections, Mf and g, the earlier material is progressively abandoned, and in Mg and h we even have a new cadence. As one might expect, it is not a simple case of the *aba* structure for M being restricted to late pieces and the multiple section type to those also recorded by ʻAlī Ufḳī. Nevertheless, if we look at the pieces by Cantemir, for example, we find that where M does have various subsections the overall effect is very different. Between the three subsections in 321 repetition is kept to a minimum, while in 279, in which there are five, M has even less in common with the kind of structure made manifest in fig. 2, and points in yet another direction, towards a large-scale through-composed form where material is constantly evolving rather than being literally repeated, and where the division into subsections is a lingering reflection of an older and increasingly obsolescent compositional style.[28]

4.2.4 *zeyil and serbend*

There are also to be considered, finally, pieces whose formal design is stretched by the inclusion of other full-scale sections, specifically those termed zeyil (Z) and serbend. The former points to another pattern of repetition, for it occurs after both H2 and H3, thus extending type 1 to:

H1 M H2 Z M H3 Z M

A majority of the pieces of this form are in darb-ı fetih and, although there are four instances (9, 12, 13, 14) where Z is lacking,[29] the association is so characteristic that it would be justifiable to think of darb-ı fetih as a rhythmic cycle with particular formal implications. These concern not only the inclusion of Z but also the marriage of cycle and section, so that all the darb-ı fetih pieces with Z are of exactly the same length, each section consisting always of just one cycle.[30] However, Z is by no means confined to the darb-ı fetih corpus,

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[26] In 202 there is no change of register, but Mb could not conclude the section because of the identity of the finalis. In 175 and 189 repetition of Ma restores a wider melodic sweep after the repetitive immobility of Mb.

[27] However, 319 adheres to the previous pattern, so that M is provided with an *aba* structure, and there are, inevitably, further variations. In 322, as in 207, it is the final segment of H1 that is resumed in M, in 328 the first two cycles of Ma that form the final two of Mb (there is an independent Mc). The extreme case, almost one of overdetermination, is provided by 305, where all of Ma constitutes the terkib-i intikal which then reappears at the end of Mb, Mc, H2 and H3, but is itself a very slightly varied repeat of H1 2-5.

[28] Feldman (op. cit., pp. 382-90) provides a lengthy analysis of this piece which proposes, further, developmental links between M and the sections that flank it. Also relevant to the general discussion here are his remarks (pp. 370-1) on the coexistence of various styles of composition during the latter part of the seventeenth century.

[29] For Cantemir (*edvār*, p. 102), Z is standard in darb-ı fetih peşrevs by Turkish composers (*rūm sāzende*), so it is not surprising two find two of the four where there is no Z given the heading *ʻacemler* (in the second case contrasting, instructively, with the very Turkish name of the composer assigned to this piece by ʻAlī Ufḳī, Sütçüzāde!).

[30] A point made by Cantemir (*edvār*, p. 80/90). This passage again contrasts *rūm* (with Z) and *ʻacem* (without). Z is considered equivalent to a hane, so that a peşrev with Z is said to have four hanes as against the three of one without (and it is perhaps for this reason that Feldman (op. cit., p. 320) lists Z as appearing only once, after H2):

اکر روم خواننده نك تصنیفی ایسه زیل دیدکلری خانه آرتریلوب پشرو چار خانه اولور ، اکر عجم خواننده سی تصنیفی ایسه زیلسز اولور ویالکز اوچ کرّه دور ایدوب اوچ خانه لی اولور واکر عدد مستعمل اوزره هر بر خانه مکرّر اولور ایسه رومك تصنیفنده سکز کرّه وعجمك تصنیفنده التی کرّه دور ایدر .

But it is clear that in the ascription to each type of four or eight and three or six rhythmic cycles respectively (repetition is evidently here viewed as optional) no account has been taken of the presence, let alone the recurrence, of M, and consequently the possibility cannot be excluded that a recurrence of Z has also been ignored. That Z did in fact recur in non-darb-ı fetih pieces is shown by Cantemir's notation of e.g. 85, 114 and 333, while for darb-ı fetih itself we may appeal to e.g. the evidence of 4 in the version by ʻAlī Ufḳī, who adds after the notation of Z the letter *m*, indicating the repetition of M, and after H3 the letters *z m*, indicating therefore the repetition of both Z and M.

appearing in nearly as many other pieces, cast in a wide variety of cycles.[31] The total number thus makes up a considerable proportion of the whole collection, some 12% in all, and it is also spread chronologically, for although half the darb-ı fetih pieces in question were known to ‘Alī Ufḳī, Z also appears in compositions by Cantemir and his teacher Angeli.

The effect of Z in the darb-ı fetih pieces is straightforwardly to introduce another layer of repetition which at the same time postpones repetition by delaying the return of the ritornello, so that the pattern becomes — M — Z M— Z M. The result can thus be greater variety rather than sameness, as in 1, where Z is the only section to modulate and at the same time serves to provide registral contrast between the rather similar contours of M, H2 and H3. However, it is rare for Z to have such a clearly delineated character of its own, and in 2 it is rather a case of a variation on material in the previous sections, so that it gives the impression after H2 of being both a coda and a transition to M, and after the modulation in H3 of being a preparatory transition that restores the original makam. But the effects are not always confined to the domain of mode, for in 3 we find a different contrastive function, the very square cut of Z, which emphasizes through repetition and the positioning of formulae a series of 8 + 8 blocks, serving to reassert rhythmic orthodoxy after the fluid and not clearly definable rhythmic organization of both H2 and H3. In 5, finally, we can see a combination of such properties: rhythmically Z contrasts with the very regular organization of H2 and the first half of M and H3; modally it prolongs and varies a brief modulation introduced towards the end of H2 and then almost proceeds like H2 in reverse while at the same time incorporating a transposed rhythmic/melodic motif from M. It thus balances the functions of integration, contrast and variation.

The variety of uses observed in just four pieces gives some idea of the range of possibilities that such an extra section can open up for a composer. In other cycles, where the proportions of the various sections are not fixed, Z may also offer flexibility of length, and when brief, as in 64, where it effects a straightforward transition of register, is hardly to be distinguished from material appended to H2 and H3 elsewhere labelled terkib-i intikal.[32] But in 85 it is as long as H2 and H3 put together, in both cases further developing the high-register material and then leading back to the lower register of M. In the Cantemir pieces, 285 and 289, we seem to find something of both types: Z in 285 is very brief, providing a cadential descent after the extended high-register development of H2, while appended to the internally repetitive H3 it is essentially contrastive; in 289, on the other hand, it is more extensive and more fully integrated.

Mention has also been made (Part i, p. xxii) of a further, very infrequent, section called serbend. A number of these appear in the ‘Alī Ufḳī collection, and as he does not add after them the abbreviation *mh* which indicates a return to M the assumption is that the serbend would be played after the last repeat of M and would therefore be the final section.[33] None of the pieces recorded by ‘Alī Ufḳī with a serbend which are common to both collections retain it in the Cantemir version,[34] thus suggesting that we have here evidence for a regularization of formal structures taking place during the seventeenth century.[35] Despite always being in the home makam and therefore ending with the expected finalis, the serbend may have been discarded because it was increasingly perceived to be anomalous, dissipating the sense of ending that had already been provided by the final repetition of M and suggesting, in however limited a way, a new itinerary that ran counter to the concluding stage of the master narrative, that of arrival. Sadly, matters are not quite this straightforward, for Cantemir also has two pieces with a serbend, and recognizes the existence of this section in the *edvār*.[36] But what is unusual here is neither the textual reference nor the existence of two such pieces: the reduction in the number of examples accords well enough with the interpretation that has been advanced, and to be systematic texts commonly refer to marginal phenomena. Rather, it is that the pieces in question, 10 and 11, are also among those recorded by ‘Alī Ufḳī without a serbend, and therefore seem to go against the trend. In both, the serbend emphasizes a plain 8 + 8 rhythmic organization, and in 10, as with 3 Z mentioned above, it might be argued that such regularity, coming after the lack of obvious symmetry in M, adds to the sense of finality. But despite the integrative effect of its initial echo of H1 and H2 the same defence cannot be put forward for the serbend in 11, which with its insistent sequential repetition seems a rather gratuitous addition, and although there is no supporting evidence one might at least in this case entertain the notion of different lines of transmission, in only one of which the serbend survived.[37]

4.2.5 *külliyat*

We may, finally, consider briefly formal aspects of the particular and rare class of peşrev termed külliyat, of which Cantemir notates three (22, 23 and 296). That they constituted a class apart is emphasized by the fact that all three are in the same rhythmic cycle, fahte, and that all three begin in the same makam, hüseyni—indeed, the first two are said to be 'in hüseyni' (*der maḳām-ı ḥüseynī*), despite the fact that their whole *raison d'être* is modulation. In these display pieces each mode occupies a separate subsection, with no fewer than 15 appearing in 296 H3. Such a high number clearly makes their structure atypical, and if one also considers structure and likely performance duration two of the properties of such pieces might be queried.

The less problematic concerns the individual subsections. In pieces that would otherwise be far longer than most other peşrevs one might wonder whether the normal repetition of subsections would be dispensed with, especially as they do not cohere in the same way as elsewhere. With repetition of all subsections, and keeping to the standard H1 M H2 M H3 M (H4 M) format, at 1 = 90, the upper end of the tempo band suggested for fahte, the playing time of 23 would be 21 minutes, that of 22 28 minutes, and that of 296 38 minutes.[38] But the evidence of the 'Alī Ufḳī version of 22 supports the assumption, embodied in the transcriptions of 22 and 23, that repetition took place normally, and one could well imagine that this was felt to be important, the listener having to concentrate first time round on identifying the mode being introduced and then being allowed with the repeat to appreciate the nature of the transition to it and the compositional craft with which it had been succinctly outlined.

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[31] The following are represented: berefşan (304), çenber (333), darbeyn (289, 332), devr-i kebir (302), devr-i revan (335), düyek (85, 147, 293), fahte (330), fer‘-i muhammes (329), hafif (114, 288), muhammes (64, 285, 292, 294), sakil (324) and semai-i lenk (284).

[32] Especially so in 304, by Angeli, where Z consists of the last three of the five cycles of M (and since these are to a considerable extent sequential the recurrence of M after Z would lead in this case to an extremely repetitive structure).

[33] This is not, however, the view of Sanal (op. cit., pp. 32-4), for whom M is always final.

[34] The pieces in question are 37, 60, 77, 87, 95 and 158.

[35] Cf. Feldman, op. cit., pp. 325-6.

[36] But during the course (p. 102) of describing the semai (of which he provides no such examples) rather than the peşrev. He speaks not of an extra hane but of an additional terkib, and rather than call it *serbend* ('headband'), as in the collection, uses the term *sinebend* ('breastband').

[37] It may not be irrelevant to note that the serbend in 10 has one or two features in common with the serbend ‘Alī Ufḳī supplies for 87, so that a distant borrowing or adaptation is not inconceivable.

The more problematic concerns the large-scale sectional structure and the modal logic that underpins it. Ultimately, what makes this type of composition different in kind from other peşrevs is not the sheer amount of material it contains, nor indeed, paradoxically, the fact of modulation, but rather the modal trajectory, which never returns to the home mode but is always venturing further into fresh territory. That normal modal habits are not merely suspended but replaced by something radically different is indicated most clearly by the nature of the ritornello section (and if M were not, structurally speaking, a normal ritornello the label would be perverse). This is, crucially, a section that in all the külliyat pieces fails to re-establish the mode with which the piece started. In 22, it is true, it does not stray too far: H1 does no more than establish hüseyni, so that the modal adventure begins in M, but it only explores modes closely related to it, moving finally from acem to end on kuçek.[39] In 23, however, where H1 fulfils the same function, M quickly moves away over the brief course of its three subsections, ending in the area of zengüle and hicaz, while in the much longer M of 296 nearly every subsection is in a mode the pitch set of which differs from that of hüseyni, and the last three all have finalis *E* instead of the original *A*. Recurring after each hane and, more importantly, terminating the whole piece, they would both emphasize the distance traversed away from the starting point.[40] Given such radically different implications one might almost wish to categorize the külliyat as an anti-peşrev.

One last piece deserves mention here, 73 (değişme), in which there is progressive substitution, section by section, of a different rhythmic cycle. But contrary to the modulatory structure of the külliyat, here each new cycle introduced in H2, H3 and H4 is followed in M by a restatement of çenber. 73 is also modally complex, with modulations throughout H3 and H4, the exploration of modally overlapping territory in H2, and micro modulations in M. But these last fail to undermine the lengthy affirmation of the return to hüseyni that M provides after the other modulatory sections, so that however complex the plot, 73 still adheres to the basic narrative design of the peşrev.

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[38] Hence the suggestion made in Part i that in this case repetition of subsections was likely to have been optional.

[39] It is interesting to note that 'Alī Ufḳī assigns 22 to acem, which may for him have included what Cantemir distinguishes as kuçek. If so, one might conjecture that this is a teleological definition, naming the mode with which the piece ends rather than the one with which it begins, and thus trying to locate in M its normal peşrev function of concluding in the home mode.

[40] In 22 one might suspect that only Ma and b were repeated after H2 and H3, in 23 only Ma, and in 296 that the terkib-i mülâzime could have been followed by repetition of the first subsection of H1, but there is no evidence to support such an interpretation.

4.3 *Diachronic strata*

It might be assumed *a priori* about an orally transmitted repertoire that in the absence of factors militating against change features felt to be stylistically antiquated or formally clumsy would, if the piece in question was not to be simply abandoned, gradually be adjusted in the direction of contemporary norms. Whether achieved by omission, substitution or transformation, such adjustment would have the effect of eroding and possibly, given sufficient time, eventually effacing completely evidence of the earlier norms. In the particular case of the corpus recorded by Cantemir it is incontestible that most of his own pieces (or, to begin slightly more cautiously, the pieces that bear his name) incorporate various features that mark them off from much of the remainder of the repertoire, and the most obvious interpretation of this contrast is that they represent a wave of innovation, pointing to the end of the seventeenth century as having been a period of fairly rapid change. But in so far as they reveal what were to become new compositional norms they at the same time embody a goal towards which, it is assumed, the oral transmission of the earlier repertoire would eventually drift, and one of the intriguing features of the collection is thus that it contains both the before and after of a major stylistic shift. Some of the features involved have already been touched upon at various points, and need to be drawn together in order to clarify the nature of that shift. But in addition there remains the task of exploring the earlier repertoire, which itself represents the selected output of possibly several generations of composers, with a view to determining whether it is characterized by homogeneity (possibly resulting from the effacement of earlier stylistic disjunctions) and consequently impervious to historical enquiry, or whether it can reveal the sedimentation of preceding stages of development, so that however subtle and insidious the process of alteration to which, say, a late sixteenth-century piece had been subjected it might, as played by Cantemir and his contemporaries, still retain features distinguishing it from a mid-seventeenth-century piece.

In addressing this question the obvious point of reference must be Feldman's careful and detailed study of historical change.[41] Briefly summarized, at the most general level his conclusions are that the corpus, especially when considered in conjunction with the mid-century notations of many of the same pieces made by 'Alī Ufḳī, does indeed provide evidence of various compositional strata, the most ancient of which is datable to the first half of the sixteenth century. A full examination of this claim would need not merely to take account of the pieces common to Cantemir and 'Alī Ufḳī but also to evaluate carefully and systematically the differences between their respective versions and, equally if not more important, to scrutinise the remainder of 'Alī Ufḳī's notations, which still await a critical edition. Such a project thus lies beyond the scope of the present study, but it is still pertinent to consider the nature of the evidence adduced and ways in which the argument is conducted.

According to Feldman, there remain sufficient indications of stylistic and structural differences for pre-Cantemir peşrevs to be assigned to the following distinct historical periods: 1500-1550 (period 1), 1550-1600 (period 2), 1600-1650 (period 3) and 1650-1690 (period 4). The choice of 1690 rather than 1700 as the last cutoff point relates to the possibility of discussing Cantemir's own output as a discrete corpus with its own individual characteristics, so that it is separated off and designated as period 5, which covers the years 1690-1710. It is, however, evident that the near-perfect symmetry of the preceding divisions betokens a degree of arbitrariness, and periods 1-4 are evidently proposed less as rigid lines of demarcation than as convenient pointers to differing centres of gravity. As the amount of material deemed to survive from period 2 is rather small, for present purposes it may be considered an appendage to period 1, and the discussion may concentrate on the diagnosis that certain pieces which can be ascribed to period 1 still preserve certain distinctive sixteenth-century characteristics.

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[41] op. cit., pp. 322-493.

4.3.1 *The sixteenth century*

Evidence for this earliest stratum is detected in court music of Persian origin as manifested in the 19 peşrevs labelled *'acemī* or *hindī*, to which can be added the pieces by two composers, Nefīrī Behrām and 'Os̱mān Paşa, one of whom is datable, to make a total of 24.[42] Viewed in relation to the collection as a whole this is quite a substantial number, and should in theory provide a more than adequate basis for ascertaining the nature of whatever contrastive characteristics might survive from the early sixteenth century. But an immediate problem (and one by no means confined to these pieces) is whether it is possible to determine the genuineness of the attributions. Thus although reference to the importation of Persian musicians during period 1 is adduced as circumstantial evidence for the authenticity of the *'acemī* pieces,[43] the argument is weakened by the admission that in seventeenth-century usage the term could also refer to contemporary musicians, the consequence being that some (or indeed all) of the *'acemī* pieces might in fact date from considerably later; and that such is indeed the case for four of them is implicitly recognized by Feldman himself in his assignment of different formal structures to different periods: these pieces are cast in the less common H1 H2 H1 H3 H1 mould (type 2),[44] which he associates with period 4, while the normal structure for period 1 is said to be type 1: H1 M H2 M H3 M (H4 M).[45] It is theoretically possible that their structure could have been altered from type 1 to type 2, especially when we find evidence for precisely this change in one of the other pieces assigned to period 1, 316, by 'Os̱mān Paşa: that Cantemir's version of this piece in type 2 is a later recasting is demonstrated by the fact that the form in which it is notated by 'Alī Ufḳī is of type 1. But there is no evidence of similar tampering with the form of the four *'acemī* pieces, and they should be regarded as dubious candidates best disregarded, thus bringing the potential total down to 20.[46] As for 316, it may be observed that acceptance of 'Os̱mān Paşa as a period 1 composer seems to be based on no more solid foundation than that 'Alī Ufḳī calls him 'Os̱mān Paşa al-'Atīḳ ('the ancient') and that this piece is placed first in his collection, thus suggesting for it a certain venerable antiquity, albeit one impossible to date with any precision.[47]

Another argument Feldman adduces for assigning *'acemī* pieces to period 1 is that one of them, 52, is considered datable on the grounds that it shares material with 54, attributed to Behrām, who is identified with the sixteenth-century Nefīrī Behrām; and that 'the two pieces are of almost identical scope'.[48] Setting aside the boldness of the extrapolation, this line of argument raises further problems, for if 'scope' refers to the number of cycles and their distribution between sections, 52 is at least as close, if not closer, to 119 (incidentally also in the same rhythmic cycle, devr-i kebir), which is attributed with a rare show of unanimity by both Cantemir and 'Alī Ufḳī to Solakzāde, who belongs to period 3; further, the material shared by 52 and 54 is not peculiar to them but formulaic,[49] appearing in a number of other pieces too, one of which is, again, 119, so that of itself it cannot point to a particular association with period 1; and even accepting that Behrām is to be equated with Nefīrī Behrām, a degree of discomfort is occasioned by the fact that he is identified as the composer of 54 only by Cantemir, not by 'Alī Ufḳī. But if 'Alī Ufḳī is here silent, in three of the other potential period 1 cases he is not, and the attributions he provides are all to later composers.[50] Discarding these reduces the total to 17, and if we set aside for the moment those he fails to include, and those he does include but for which he fails to provide corroborative identification,[51] just four remain as, on a combination of formal pattern and circumstantial evidence, the most likely candidates: 37, 52, 61 and 316; and it is with regard to these that we may examine the claim that period 1 pieces tend to exhibit 'structural differences from the later material'.[52] More specifically, they are said to be characterized by: the melodic unit consisting of a cycle or half cycle; repetition and imitation, with the cycle or half cycle often having an AAAB or ABAB structure; lack of a developed melodic progression; and modulations which cover not less than a whole (sub)section.[53]

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[42] ibid. p. 339 (the discussion continues until p. 350). The initial outline of this period (p. 325) terms it the 'period of the "Acemler" and "Hindûyân"', while previously (p. 323) there is reference to the 'Persian' and 'Indian' repertoire of period 1. Nefīrī Behrām is datable to the first half of the sixteenth century, being mentioned as a mehter musician active in 1542 (p. 324). As four pieces are attributed to him (including, however, two just headed Behrām), to which are added two by the more obscure 'Os̱mān Paşa, the total should be 25, but two of the peşrevs, 218 and 282, are slightly different versions of the same piece.

[43] Specifically during the reign of Süleyman the Magnificent (1520-66). The argument (p. 324) that the 'Persian *peşrev* repertoire' can be put further back, to the reign of his predecessor Selim I (1512-20), on the grounds that in the mid-eighteenth century Fonton's informants regarded this as the period of greatest Persian musical influence, is intrinsically flimsy, and further reasons for questioning the connexion have been put forward in E. Neubauer, 'Zur Bedeutung der Begriffe Komponist und Komposition', *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften*, 11, 1997, 307-63.

[44] 68, 100, 102 and 286. Feldman's inclusion of these pieces, which thus lack a mülâzime, in his assessment (p. 324) that 'the originals of the nineteen [*sic*] Acemî and Hindî *peşrevs* with *mülâzime* notated by Cantemir probably date from not later than the middle of the 16th century, and possibly from the earlier 16th century' is presumably an oversight.

[45] ibid., pp. 325-6. Cantemir (p. 102) associates type 2 specifically with *'acemī* instrumentalists; but, as Feldman observes (op. cit., p. 319), 'We learn from his notation that some Turkish *peşrevs* also adopted this structure.'

[46] Feldman himself refers to them (p. 315) as 'the Persian-style peşrevs of the mid to late 17th century'.

[47] ibid., p. 346.

[48] ibid., p. 324.

[49] The last entry in ex. 42, p. 453.

[50] 13 (*'acemler*) to Sütçüzāde, 58 (Nefīrī Behrām) to Şerīf, 160 (*hindīler*) to Solakzāde.

[51] 9, 27, 29, 54 and 95.

[52] ibid., p. 323.

[53] ibid., p. 325.

This formulation is not wholly clear. For example, no definition is offered for the crucial but rather elusive concept of a developed melodic progression. In addition, the typical structures proposed for a cycle or half cycle would seem to point to the fundamental melodic unit being a quarter or an eighth of a cycle rather than a whole one or a half, and such divisions in any case have rather different implications depending on the length of a cycle in question. It may therefore be better to begin with the more obvious category of repetition and imitation, and here the analysis offered of 52, to take the one included among the group selected for scrutiny, certainly makes the point. Nevertheless, it is not immediately apparent that these are characteristics that occur in a form sufficiently distinctive to be regarded as typical of period 1, as may be seen from table 1:

52	H1	-	-	a	-	a	b	c	d				
	Ma	e	f	e	g	e	f	e	h				
	Mb	a"	i	e	g	j	i	e	h				
	Mc	j'	i	e	g	j'	i	e	h				
	Md	e	f'	-	-	a	b	c	d				
119	H1	a	-	a	-	-	b	c	d				
	Ma	e	-	-	-	f	g	c	d"				
	Mb	h	i	e"	-	h"	i"	f"	-				
	Mc	f	b"	f"	g	f'	b"	e'	d"				
134	H1	a	b	b	c					d	e	f	a"
	Ma	g	a"	h	i	g	a"	h	i'	d	e	f	a"
	Mb	b	c	a"	i'"								
	Mc	-	b'	d"	i'					d	e	f	a"

(' indicates a variant, " repetition of the same contour at a different pitch)

Table 1

Breaking the devr-i kebir cycle down into its four component cells, this displays the incidence of repetition in the exposition in 52 H1 and M, and then adds an analogous breakdown of two other pieces in devr-i kebir by major period 3 composers, 119 (yet again) by Solakzāde and 134 by Şerīf. Comparison between 52 and the other pieces demonstrates that a high level of repetition and imitation does not of itself provide a secure indication of period. Moreover, it fails to provide evidence for the more specific claim that typical of period 1 is an AAAB or ABAB structure at the level of the cycle or half cycle, although one might argue that some support for this contention may be drawn from 52 Ma. But this structure is absent from the other potential period 1 pieces, 37, 61 and 316, where, if we divide their cycles, düyek[54] and

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[54] For 316 taking 'Alī Ufḳī's definition. If Cantemir's muhammes is preferred then the cycle is to be divided into four cells: the representation is not affected thereby.

fahte, into two cells each, H1 in 37 and 61 and H1/M in 316 may be represented as follows:[55]

37	H1a	a	-	-	a"	-	-	-	a"
	H1b	b	b"	b"	b"	b"	-	-	-
61	H1a	-	a	-	-	-	a"		
	H1b	b	c	b	c'	-	a"		
316	H1	a	b	c	d	e	f	g	h
	Ma	-	d	i	d"	i'	d	-	h
	Mb	a	b	c	d	e	f	g	h

As the repetitions in 37 H1b are formed by a descending sequence covering two-and-a-half cycles we are left only with what is an almost exact repetition of a whole cycle in 61 H1b as a possible example of this putatively typical structure. It is difficult, in consequence, to accept the claim about the differential quality of repetition in period 1, or the related one about the nature of the melodic unit. Instructive here is to compare H1/M in 316 with H1/M in 297, a period 4 piece by Cantemir's teacher Angeli: the greater surface complexity allowed by the different notational code used for the latter fails to conceal the fact that it starts with virtually the same melodic gesture, and proceeds to rely to a far greater extent on repetition, whether literal or sequential, as a compositional tool. There thus seem to be no good grounds for regarding these four pieces as evincing distinctive differences of compositional technique with regard to repetition when compared with presumably later pieces, and the melodic structure of all the pieces examined here can be accounted for equally satisfactorily in terms of the mapping of formulae onto cells as practised in the previous section.

Nevertheless, it does not follow from such a negative conclusion that these four pieces cannot belong to period 1, nor that whatever pieces might plausibly be assigned to period 1 have lost all distinguishing features, merely that considered individually the particular parameters that have been scrutinized so far do not offer a satisfactory means of discrimination. But there still remains to be considered, alongside the suggestion about the domain of modulation, the somewhat subtler notion that period 1 pieces may be characterized by the archaic nature of their melodic development when considered on a scale larger than the single cycle, that is, over whole (sub)sections.[56] Given the difficulties encountered in authenticating material, whether by simple attribution or by the other criteria examined so far, the kind of analytical approach that this implies is the obvious alternative, working from known norms towards the conclusion that material of an evidently different cast may well survive from an earlier period and give a clue to some of its characteristics.

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[55] They are represented as separate sections as in the 'Alī Ufḳī's version. For Cantemir, as noted, they have become a single composite section. The assumption here is that the structural unit of comparison is one of two cycles. Feldman speaks only of a fourfold division, but it seems clear that in the case of the shorter cycles the division must be of a unit greater than a single cycle. In his analysis of 52 (p. 341) the unit in question is the subsection, which normally consists of two devr-i kebir cycles, so that e.g. ABAC refers to half cycles.

[56] Feldman refers here (pp. 341-3) to 'melodic progression', a phrase which in the discussion of 52 is first used in the context of the general melodic contour of various subsections, each spanning two cycles, and the domain of which is subsequently expanded to cover whole sections, with allusions to the modern concept of *seyir* as a point of reference.

Representative of this approach is the first part of the companion analysis Feldman offers for another presumed period 1 piece, 27. This begins by invoking both the modern repertoire and Cantemir's description of the mode in question, 24. pençgâh, in order to construct a standard late seventeeth-century melodic strategy in relation to which that of 27 is perceived to be deviant and, hence, ancient. Although this particular case is unfortunately somewhat problematic,[57] it is clear that the general approach is methodologically sound. To be convincing it requires, nevertheless, that two conditions be met: that it employ, as far as possible, objective rather than intuitive criteria; and that it avoid the pitfall of assigning pieces to different periods merely on the basis of relative simplicity and complexity, however defined.

4.3.1.1 *Melodic density*

Bound up with the latter condition is the possible contamination of the notion of differences in melodic progression which, as articulated, seem to imply a trajectory from simple/brief/un*seyir*-like towards complex/extended/*seyir*-like, with that of changes in melodic density. It is tempting to think that the latter might serve of itself as an adequate period indicator because of the existence of a number of peşrevs that remained in the repertoire over long periods and during the eighteenth and nineteenth centuries acquired a more complex melodic surface in comparison with the form in which they were notated in the seventeenth century.

In such cases differences in melodic density are a clear index of historical change, and it might be thought, in parallel, that the late seventeenth-century representations of more ancient pieces could embody the results of similar elaboration. But if so, they should not be expected to exhibit significant variations in melodic density when compared with less ancient pieces; rather, they ought to embody the results of a process of drift which erodes the evidence of earlier stages by constantly moving in the direction of current norms which would also, by definition, be embodied in new additions to the repertoire. However, even when we set aside the later part of Cantemir's collection because of the potential effects of variations in notational practice, it is still the case that the first main block of peşrevs, virtually all written in the vezn-i kebir code, does not present the uniform surface that such drift should theoretically produce. As has been noted in the discussion of various rhythmic cycles there do sometimes appear to be marked differences in melodic density between comparable pieces,[58] and it is clear that such variation must have fallen within the bounds of what was stylistically acceptable. One possible reason is that, as later, certain segments of the repertoire were more prone to elaboration than others (thus suggesting gradually increasing differentiation, and at the same time complicating the search for period markers). But if so, it would follow that new pieces might not be clustered around a particular density level and that there would be no pressure to elaborate older pieces falling outside the affected areas, as they might still conform to contemporary norms at a relatively low level of melodic density. Accordingly, the usefulness of variations in density as a possible dating tool is severely diminished, and certainly requires as a precondition that the segments of the repertoire to which it was relevant could be properly isolated from the remainder.

However speculative, this line of argument has the merit of admitting that the hypothesis of constant elaboration may not have been relevant to at least part of the earlier repertoire. Indeed, the assumption of universal applicability would raise difficulties of a fundamental order, for if we consider those peşrevs attributed to earlier composers which, as notated by Cantemir, are already characterized by low melodic density, it is evident that the significant further reduction incorporated into whatever was postulated as an antecedent form would yield a quite implausible melodic minimalism. As a result, one is forced either to reject the hypothesis or to conclude that such pieces belong to part of the repertoire that remained immune. But where the boundary might lie between affected and unaffected areas remains unclear, and that element of undecidability means that in no individual case can an earlier less elaborated form automatically be assumed, especially when, as has been seen with, say, the düyek corpus, pieces exhibiting significantly different levels of melodic density can coexist and remain virtually unchanged in transmission over at least the half century between ʻAlī Ufḳī and Cantemir.[59]

A related difficulty concerns what we know of the pre-seventeenth-century history of Ottoman and related Middle Eastern traditions. This suggests that the late sixteenth century (i.e. much of Feldman's period 2) was essentially transitional, for there is a considerable gap between, say, the modal and rhythmic nomenclature of the court music of the time of Süleyman the Magnificent and that evidently already well established by the time that ʻAlī Ufḳī began his career, and there is, further, evidence for radical discontinuity between the two periods in the vocal repertoire. The apparently unsophisticated nature of many of the text settings notated by ʻAlī Ufḳī accords well enough with the notion of a tradition relying to a considerable extent on popular styles to form a new corpus,[60] and although he fails to record an example of what was to become the most extended vocal form, the kâr, there is no reason to suppose that in his day its formal complexity would have matched that of the antecedent *ʻamal* as manifested in song-text collections of the sixteenth century. While this is not to be interpreted as meaning that nothing would have remained of the earlier instrumental corpus, it does suggest that there are no good grounds for postulating *a priori* stylistic norms for the first half of the sixteenth century characterized by relatively primitive modal cum formal structures when compared with those of the mid-seventeenth century. It is also possible that continuity may have been somewhat restricted, occurring primarily in certain functionally specialized areas such as the mehter or Mevlevi repertoires; and, as already noted, whatever pieces did survive might in any case have been subjected to recasting to rid them of features deemed strange or archaic. The hypothesis that the evolutionary process of elaboration noted for later periods, whether gradual or spasmodic,[61] could be simply projected back to account for developments from the early sixteenth to the late seventeenth centuries thus seems untenable: at best it might be entertained within the context of the largely new seventeenth-century repertoire. But for this we do at last have a control corpus, and on the basis of a comparison of the ʻAlī Ufḳī and Cantemir versions of the same pieces the conclusion must be that as far as melodic density is concerned stability rather than change characterized much of the seventeenth-century repertoire. Indeed, the surface presented by the earlier version, even setting aside ʻAlī Ufḳī's tendency to indicate more rhythmic subdivisions of a given pitch, may well be more complex than the later.

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[57] 27 is a slightly unfortunate choice for this form of assessment, as its modal identity is ambiguous: it appears that during the seventeenth century pençgâh was in a state of flux, and determining its norms as an independent mode separate from rast is at best problematic and at worst irrelevant to an evaluation of 27 as a surviving piece from an earlier era, for it is to rast that it is assigned in the version recorded by ʻAlī Ufḳī.

[58] See e.g. the discussion of the first two cycles, 3.6.1 berefşan (details in table 14) and 3.6.2 devr-i kebir (details in table 16).

[59] Compare, say, 107 with 112.

[60] This would also form a plausible scenario for the degree of popularity and assimilability that must have been a precondition for the particular form of diffusion manifest in the many Hebrew *contrafacta* documented from the late sixteenth century onwards (see A. Tietze and J. Yahalom, *Ottoman melodies Hebrew hymns: a 16th century cross-cultural adventure*, Budapest: Akadémiai Kiadó, 1995) which served as a preliminary stage to the creativity manifest in the composition of new vocal pieces in a later, more sophisticated style (see E. Seroussi, 'The peshrev as a vocal genre in Ottoman Hebrew sources', *Turkish Music Quarterly*, 4/3, 1991, 1-9).

A simpler and perhaps more attractive explanation for the variations in melodic density exhibited by Cantemir's collection is that the selective process of retardation allied with elaboration may have been just beginning in his day.[62] If so, it would not have been a factor in the transmission of the earlier repertoire which, in consequence, whatever other changes it had been subject to, can be expected to have preserved something approaching its original level of melodic density. The more marked differences within the range for each major rhythmic cycle corpus could once more, according to this view, be regarded positively as an indication of style grouping with potential chronological implications. Although they can provide neither an automatic period correlation nor a secure indication of distance between dates of composition when considered in isolation, they may certainly be used to reinforce whatever other formal, stylistic and circumstantial evidence is available.

It is with regard to developments in the second half of the seventeenth century that this tends to be most compelling. Both for this reason and because of the difficulties surrounding the criteria proposed for assigning pieces to the first half of the sixteenth century it would seem sensible to reverse the perspective and continue by considering these various sources of information in relation to the body of work that can be most accurately dated and from which, accordingly, it should be possible to derive a rather more secure set of style characteristics for a given period. We turn, therefore, to the latest part of the repertoire, and in the first instance to Cantemir himself.

4.3.2 *The Cantemir material*

As has been seen, with the earlier pieces attributions are not always to be accepted at face value, and even when there is no disagreement about the identity of the composer biographical information may be scanty or non-existent. Dating is thus hazardous, and consequent inferences about period characteristics precarious. Against this uncertain background the temptation unquestioningly to accept the various pieces attributed to Cantemir as genuine

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[61] Even if the hypothesis were thought persuasive it is important to note that the process of change may have occurred in sudden spurts rather than smoothly, so that dating again becomes hazardous.

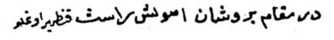
[62] An explicit reference to performing at a slow tempo is noted in 3.7, although it is not, admittedly, remarked upon as an innovation.

and thus providing a securely dated platform for comparative study and periodization is almost irresistible. But before embarking on an attempt to sketch a stylistic profile it is pertinent to begin by querying exactly how secure the attributions are, for quite apart from the interesting but here irrelevant question of later accretions,[63] definition of the Cantemirian corpus as preserved in the collection is not quite as simple as it first appears.

4.3.2.1 *Authenticity*

The available evidence, in short, is by no means always incontrovertible. It consists of two elements, one being the presence of Cantemir's name in the heading above the notation. There are 15 pieces that are indentified in this way as being by him: 227, 278, 279, 280, 281, 285, 289, 290, 302, 321, 323, 331, 332, 335 and 336.[64] But problems arise, and in particularly acute form, in relation to the very first of these, for judged solely on the basis of the notation it would be difficult to come to any conclusion other than that 227 cannot be a composition by the compiler of the collection himself. In the first place, as noted in Part i, it is incomplete, despite space being left for a third hane, and it is hard to accept either that Cantemir had forgotten part of it but decided to include it nonetheless (presumably assuming his amnesia would be only temporary) and then failed to return to it; or that he thought it appropriate to notate as the first of his own compositions a still unfinished piece and one which, in the event, was to remain unfinished. Moreover, it may be noted that all the remaining pieces attributed to Cantemir in their headings come in the final block of the collection following the semais, and on that basis it seems plausible to conclude that he had decided to record only the works of other composers in the first two blocks, turning to his own thereafter. The case against the authenticity of 227 is thus strong, and it is reinforced by stylistic disparity: simple to the point of being simplistic, its compositional technique stands in sharp contrast to the complexities of most of the pieces with a more reliable attribution, so that if genuine it could only be understood as pastiche or, more likely, an apprentice piece.

All this, it may objected, cannot outweigh the simple but decisive presence of Cantemir's name in the heading, which is as follows:



در مقام بروشان اصولش راست قنطیراوغلو

But it does not belong to the original layer of the heading: as with many other pieces, the identification of the composer is a later addition. Although graphological certainty cannot always be attained, it appears that at least some of these additions are in a different hand (or hands),[65] and this certainly appears to be the case for those attributed to Cantemir himself. In the present instance the name seems to have been written rather more rapidly than the remainder of the heading, but with all due allowance for haste the linkages between the letters are not typical of the main text, and the conclusion that a later hand has been at work is reinforced by the further consideration that the orthography does not tally with that used in the treatise.[66] It is to this same hand that may be attributed the majority of such additions,[67] while in the case of 290 yet another hand appears, this time one which is much more obviously different from Cantemir's own. This does not, evidently, alter the fact that these pieces were thought to be by him,[68] but it does mean that we do not know by whom, so that it is not clear whether the identification was made by a contemporary and presumably highly trustworthy authority or was added by a later and possibly less reliable one.

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[63] See the Appendix (5.4).

[64] There is also 351, but this is no more than an alternative version of 331.

[65] A very clear example is provided by the Solakzāde added on p. 65 of the collection, while even more obviously posterior is the *ʻacemler* on p. 69.

Nevertheless, such uncertainty may be classed more as a minor logical irritant than a severe impediment to acceptance. Save in the case of 227 there would appear on the basis of the evidence so far to be no firm grounds for rejecting the attribution to Cantemir of the pieces to which his name has been added. But matters are complicated somewhat by the other potential source of information, which is to be found in the indexes. The second of the three does not refer to composers at all and, apart from noting that it has no entry for büzürk and therefore fails to include 332, may be disregarded. The first, on the other hand, does generally mention composers: but although it includes all but one of the pieces to which his name has been added in the headings,[69] it actually ascribes none of them to a composer: they are referred to simply as *cedīd* ('new'). However, as there is a virtually perfect match, this designation otherwise appearing alongside only one piece (198) the heading of which does not identify Cantemir as its composer, it is tempting to regard it as a positive indication, constituting, in effect, a coded reference, modest in its anonymity.[70] Confidence in this conclusion is undermined, however, by the fact that in no fewer than six cases[71] the entry appears, disconcertingly, in the *nā-mevcūd* column, that devoted to pieces Cantemir had heard of but at the time had not yet managed to track down, hardly a category to which he could have assigned any of his own compositions.

But that these six might nevertheless be authentic is suggested by the third index. Here, in fact, we find indisputable evidence that three of the 15 peşrevs are by Cantemir, and two of the three, 279 and 280, are among those that had appeared in the *nā-mevcūd* column in the first index. The third is 281, and the composer of all three is identified by a conventional expression of modesty which must be understood as referring explicitly to the speaker/author, the term *ḥaḳīr.*[72] Further, it is in the third index that we find marginal entries relating to the

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[66] Corresponding to the *'wġlw* in the heading we find *'wġly* in the treatise, as in e.g. Buhurcıoġlī (in the third index, p. 135).

[67] The pieces in question are 278, 280, 281, 285, 289, 302, 321, 323, 331, 332, 335 and 336.

[68] Likewise, 351 (the second version of 331), a later addition the notation of which is in another hand, includes Cantemir's name in the heading (written *q'ntmyr* as against the usual *qnṭmyr 'wġlw*) and thus provides further evidence that the piece was considered to be his.

[69] The exception is 332, added in a later hand but with no accompanying information.

[70] A further feature these entries have in common is that for those makams represented by more than one peşrev, that called *cedīd* is inevitably the final one. Given such widespread use of the term *cedīd* in the index it might be conjectured that it has the same force in the heading of 332, i.e. referring to the piece as a whole, especially as it makes no sense in specific relation to the rhythmic cycle.

[71] 279, 280, 289, 321, 331 and 335.

[72] Literally 'lowly, contemptible', i.e. 'your humble servant'. In the same way the entry for geveşt identifies Cantemir as the composer of another peşrev, in çenber, which is not included in the collection.

semai repertoire, ignored in the other two, and for both buselik aşirani and geveşt we find references to a ṣemại by Cantemir, again referring to himself as *ḥaḳīr.* The collection contains a semai in each of these modes, but whereas it seems reasonable to regard the one in geveşt, 284, as an addition to the Cantemirian corpus, there being no competition for authorship, that in buselik aşirani, 271, is more problematic, for three in all are mentioned in the margin, and only the one is notated.[73]

However, assuming that all six pieces entered in the *nā-mevcūd* column of the first index are genuine, an explanation still needs to be found for their unexpected location. Perhaps the least implausible conjecture is that Cantemir first produced an index that omitted his own pieces and that subsequently, having decided to add them after all, he simply tacked them on indifferently in either column, paying no heed to the known/unknown distinction, which would be irrelevant to his own output.

The Cantimir pieces in the collection may, accordingly, be regarded as consisting of:

- four for which Cantemir himself provides firm evidence of authorship:
  279, 280, 281, 284

- ten for which the identification of the composer is probably in another hand (and which Cantemir refers to in the first index as 'new' pieces):
  278, 285, 289, 302, 321, 323, 331, 332, 335, 336

- one for which the identification of the composer is certainly in another hand (and which Cantemir also refers to in the first index as a 'new' piece):
  290

- two dubious attributions:
  227, 271

But omitted from this formulation is the parallel statement for 227: this too is one of the *cedīd* pieces, and to the extent that the match between heading and index entry is regarded as a positive indication supporting attribution it can also be invoked in favour of 227. Nevertheless, the arguments against it voiced above remain no less valid, and if it is to be admitted to the canon (as, presumably, an early and immature as well as inexplicably incomplete piece) it still stands at some considerable stylistic remove from the remainder, and it is these which must serve as the basis for any description of Cantemir's innovatory turn-of-the-century style.

4.3.2.2 *Characteristics*

Setting aside the dubious 227 and 271 there are 15 pieces to be taken into account. Considered as a set they are atypical of the collection as a whole in their modal and rhythmic identities. In a random group of just 15 it is only to be expected that one or two of the more common rhythmic cycles should not appear, but it may be noted that the absentees here are düyek, fahte and semai, which between them account for some 40% of the collection, while the cycles that are represented included two of the rarest, fer'-i muhammes and remel, and one, indeed, that is unique to Cantemir, the variant truncated form of darbeyn that appears in 289. But even more unusual is the modal complexion of the set: the six most common makams (hüseyni, neva, rast, ırak, segâh and acem), which account for over 50% of the collection, are all conspicuously absent, and among the 14 that are represented we find an exceptionally high proportion of rare modes. Indeed, in no fewer than seven cases (bestenigar, büzürk, geveşt, sipihr, sultani ırak, uşşak aşirani and zengüle) Cantemir's own compositions are the only ones in the collection to represent them,[74] thereby demonstrating a considerable divergence from the modal preferences of composers of the preceding generations.

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[73] It is included by Popescu-Judetz, op. cit., pp. 345-7, but not by Burada. This semai also appears in the Kevşerī collection, but the composer is not identified (E. Popescu-Judetz, *XVIII. yüzyıl...*, p. 39).

By itself, Cantemir's predilection for rare modes might simply be dismissed as quirky, the personal expression of taste of a possibly experimental composer, but viewed with the hindsight of historical context it is fairer to regard it as symptomatic of an incipient enlargement of resources and a redrawing of the modal map that would continue throughout the eighteenth century and beyond. Nevertheless, it is still significant that at this early stage it is the more unfrequented areas of the map that are being colonized. Indeed, only two of the 14 modes Cantemir uses, bestenigar and muhayyer, could be classed as belonging to what is for him the dominant class of main-note makams, and even then the former is one he places in a subordinate category. The great majority contain secondary notes, preference being given to modes with *B* in place of *B*𝄳 (buselik, buselik aşirani, büzürk), *c*♯ in place of (or in addition to) *c* (geveşt, ısfahan, sultani ırak, zengüle), or both (pençgâh). Further, the seven that only he uses are all marginal in one or more respects: they are either perceived to be derived forms relatable to more common modes (bestenigar, büzürk, sultani ırak); have a unique pitch set (geveşt, sipihr); and/or stress extremes of register, more frequently exploring the generally less common lower register (uşşak aşirani, zengüle), but in one case (sipihr) the highest.

One of these seven modes, 15. geveşt, is actually used by Cantemir twice, in 280 and 284, and some insight into his compositional technique may be gained by revisiting these pieces, taking into account structure, proportions and melodic-rhythmic characteristics. The initial impression they give is of considerable length: 280, in sakil, would consist of no fewer than 34 cycles if M were repeated on each occurrence,[75] and although 284, in semai-i lenk, would probably have been played at a distinctly brisker tempo it is still evidently a large-scale piece. This is despite the fact that there is no contrastive modulatory section, and that apart from one high-register cycle in H3 its range barely exceeds the octave, ranging from *A*♯ to *b*𝄳. Its dimensions are partly caused by a complex pattern of internal repetition: not only is there a Z section appended to H2 and H3, but it is also, exceptionally, added after M, while Ma ends with a repetition of the last four cycles of H1. There are, further, a number of cycles that reappear in different sections, and this, coupled with the insistent phrasing in groups of four cycles each ending with virtually the same cadence,[76] brings to mind Cantemir's reference in his list of cycles to *semā'ī-i raḳḳāṣ*: this is clearly a dance piece.

280 is very different in character. Here M is by far the longest section, consisting as it does of four cycles as against the two of H2 and H3 and the one of H1. But such proportions are by no means unusual, either generally, or specifically within the sakil corpus;[77] rather, what seems to be exceptional about 280 M is its internal structure, for whereas in other pieces the equivalent is always divided into two, three or even four subsections, the most frequent unit being the single cycle, here the conception is quite the opposite of what we find in 284. There is no internal division, and the four cycles are conceived as a single through-composed span, so that in this piece at least it would appear that whatever individual thumbprints there might be are more likely to be found in specifics of melodic development.

Here we may begin by looking at the two geveşt pieces together. As may be seen from 2.2.3, ex. 27, it is clear that however much the structure may diverge later, the H1 exposition consists in both of the same two elements variously repeated: (A) an *f*♯ → *d* descent and (B) an *f*♯ → *B*𝄳 descent, the order being in 280 A A B and in 284 B A B B;[78] and in each the same form of elaboration tends to be repeated. But despite such unanimity what is also clear is that without a control corpus conclusions are difficult to draw about either period or personal traits: these two opening sections conform to the standard expository pattern in that they provide a pithy outline of what may be assumed to be characteristic features of the mode, and to that extent they are akin to much earlier pieces. When seeking to investigate diachronic gradations such modal singularities thus present a dilemma: they provide contrasts that are significant, but to the extent that they are absolute rather than comparative they can do little more than help reinforce what is already known, namely that the remainder of the notated repertoire is earlier. In considering how resources are used and, in particular, attempting to detect compositional features peculiar to Cantemir that might contribute to the description of a period style, it is clear that as far as the domain of modal strategy is concerned little or nothing can be gained from further study of the seven modes peculiar to him: that the eight pieces in them have unusual characteristics is certainly noteworthy, but whether these inhere in the mode or represent a particular composer's inflection of them cannot be determined.

It is thus with the pieces in bẹyati, buselik, buselik aşirani, ısfahan, mahur, muhayyer and pençgâh that any comparative investigation of modal practice must be concerned.

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[74] Excepting only the fleeting appearance of bestenigar, büzürk, geveşt and sultani ırak in 296.

[75] The lack of a repeat sign in the transcription in Part i is arbitrary and, given that there is no internal repetition, probably best considered a misjudgement.

[76] The complete regularity in this respect in every other part of the piece suggests that there is something amiss with Mb. Possibly, having used teslim to indicate block repetition, Cantemir did not wish to use it again to denote the onset of the seconda volta ending, and turned to mükerrer instead to mark the end of the prima volta. Accordingly, Mb would have the structure 1-4 + 1-2 + 5-6, and the emendation in 2 would have to be rethought: conceivably this too had prima/seconda volta variants, and if so we might even find here the reason for the omission. Regularity of successive blocks of four cycles each marked by a cadence is also a feature of the other semai-i lenk piece possibly by Cantemir, 271. However, this is more likely a feature of the genre, and therefore neutral as a style indicator. To be noted in this piece is the structure of H3d, which extended the common 2 + 2 articulation of the blocks of four cycles to produce 2 + 2 + 2; and the extra final attack in the teslim, extending beyond the end of the cycle.

[77] Cf. 92, in which the only difference is that H1 consists of two cycles.

[78] To be noted also in 284 is the insistent pattern of the cadences at the end of each four-cycle phrase throughout H1 and M (+Z): *d*, *f*♯, *B*𝄳, *d*, *B*𝄳, *f*♯, *d*, *f*♯, *B*𝄳.

Likewise, investigation of the way melody is married to rhythmic cycle can best be conducted on those pieces in the more common cycles used by Cantemir: berefşan, çenber, darbeyn, darb-ı fetih, devr-i kebir, devr-i revan, muhammes and sakil. Those that fulfil these two conditions are 279, 285, 321, 331 and 335, and it is in fact 279 and 285 that are subjected by Feldman to extended analyses that compare them to other pieces in the same mode (235 and 112 respectively).[79]

These analyses are complex and detailed, but their main thrust concerns relative sophistication of melodic progression, and frequently invokes the concept of *seyir*.[80] There is much here that is illuminating, but the analysis proposed in 2.2.11 (ex. 78) suggests a rather different perspective, at least in relation to 235, which could be regarded as innovatory and daring in its own way by postponing to M any approximation to the standard expository *g c′ b♭ a* outline of muhayyer and confining itself in H1 to a stark statement of the triadic descent *a e c A*. On the other hand, it is certainly true that a corollary of the very terseness of 235 H1 is an absence of the detailed melodic working out found in Cantemir's H1. However, the evidence of ex. 78 also suggests that the claims made for the latter are difficult to sustain: one only has to look at 81, the first piece in ex. 68 (also found in the ʻAlī Ufḳī collection and therefore antedating 285 by not less than half a century), to find that H1 is almost as long, contains virtually no literal repetition, and can hardly be considered any less unified or developed.[81]

As before, there appears to be no single stylistic criterion that can provide a foolproof indication of period by itself. Consequently, the only effective way to proceed would appear to be to take account of the main structural elements collectively and attempt to aggregate all the style markers they yield, and it is precisely such a combination of factors that is examined in Feldman's subtle companion analysis of 279 (with which is contrasted 112),[82] although what is stressed, ultimately (and justifiably), is the uniqueness of this piece, adjudged to be the most complex and innovatory of all his compositions.

4.3.2.3 *Contrasts*

These are attributes that would no doubt disqualify it from serving as a typical representative of its composer's output, but not from being referred to when attempting to sketch a brief profile of how it differed from what had gone before. For this purpose one may take as a term of reference the chronologically secure corpus of pieces common to Cantemir and ʻAlī Ufḳī, and the following descriptive statements are all comparative in intent.

The most pertinent parameters appear to be: choice of mode and rhythmic cycle, modal practice (construed in the most general sense), patterns of modulation, melodic density, patterns of melodic/rhythmic congruence, degree of formulaicity, and formal structure. These have generally been touched upon individually in various contexts and need not be explored in greater detail, and certainly not with respect to each individual piece, but a brief review should result in a sufficiently clear indication of what is particular to a body of material that, given the respect in which it was later held, may be regarded as representative of a period as well as of an individual.

In the light of the above discussion, all that needs to be stressed here about Cantemir's modal and rhythmic choices is that they are marked by a predilection for entities that are either marginal to or, indeed, wholly absent from, the earlier corpus. Among modes (listed in table 2), as has been remarked above, we encounter mainly ones with secondary notes, and he also shows a greater interest in those which explore the lower register, while among rhythmic cycles (listed in table 3) one may note a preference for cycles in the 12-16 time unit range[83] and the relatively much greater prominence accorded aksak cycles.[84] The differences in distribution, especially bearing in mind the 8 : 1 size ratio between the two groups of pieces, are quite stark.

As far as modal practice is concerned it is possible to detect in the initial emphasis on *c* in 335 (in buselik) an individual stylistic feature linking it to 279 (in buselik aşirani), while potential period markers are, in these pieces, the use of the raised leading note, *G♯*, and in 331 the form of beyati which generally prefers *e♭* to *e*, and the similarly later form of pençgâh. But in general there are no major innovations to be reported, and for modulation little need be added save to note the novel directions taken in 335 H3.

More significant is melodic density, which has been dealt with during the course of the discussions of individual rhythmic cycles, and this, together with differences in patterns of melodic-rhythmic congruence, is one of the most indicative features separating some of Cantemir's compositions from those surviving from the first half of the seventeenth century. Nevertheless, a brief summary will suffice, with references confined to just a few pieces (but including the remaining ones in the more common modes and rhythmic cycles, 321, 331 and 335). The main observation to be made about increased melodic density concerns firstly the way in which it is distributed, with some rhythmic cycles remaining unaffected,[85] and secondly the way in which, where it does occur, it is enmeshed within the cell structure of the cycle in question. In 331 what rhythmic subdivision there is is generally concentrated at the beginning of the cycle, and overall the average number of pitch changes per cycle is actually

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[79] op. cit., pp. 373-91.

[80] Thus 235 is said (p. 375) to suffer from a 'weakness of melodic progression'; and H1 and M 'concentrate on a single section of the *seyir*' (while H1, rather puzzlingly, 'telescopes the entire *seyir*'). Further, the compositional technique of 235 (by Eyyūbli Meḥmed Çelebi, a musician quoted as an authority by Cantemir, and hence probably datable to the second half of the seventeenth century) is characterized as arising 'from a conception of *makam* in which a codified melodic progression was not yet the ground on which the specific melody was built up'. In the context of diachronic enquiry Feldman's conclusion that in this respect the piece is similar to much earlier peşrevs, including presumed sixteenth-century ones, is not particularly comforting. 285, in contrast, is regarded as representing a 'new approach', to the extent, indeed, that it bears comparison with the early twentieth-century *seyir* published by Rauf Yekta Bey (quoted on p. 380). The final verdict on H1 is that the 'degree of unification and development of the *serhâne* had not appeared in any earlier *peşrev* in Cantemir's collection'.

[81] As Feldman himself recognizes, it anticipates Cantemir's 'modern-looking *seyir*'.

[82] Pp. 382-91. This detailed analysis would only be distorted by being summarized here. It stresses, rightly, the novelty of H1 and M, both of unprecedented length, and argues for deliberately close-knit connexions between M and the following hanes.

[83] These (berefşan, çenber, (the short form of) darbeyn, devr-i kebir, devr-i revan, fer'-i muhammes, muhammes) account for 11 of the 15 pieces.

[84] These (berefşan, darbeyn, devr-i kebir, devr-i revan, remel, semai-i lenk) account for 10 of the 15, i.e. 67%. The equivalent figure in the earlier corpus is 20%.

[85] The levels in 321 (devr-i kebir), 331 (çenber) and 335 (devr-i revan) are not particularly high, but their melodic surface is rendered busier by a greater number of attacks at the same pitch.

	early corpus	Cantemir
acem	11	0
arazbar	2	0
baba tahir	1	0
bestenigar	0	1
beyati	1	1
buselik	1	1
buselik aşirani	2	1
büzürk	0	1
eviç	5	0
geveşt	0	2
hüseyni	18	0
huzi aşiran	1	0
ırak	10	0
ısfahan	0	1
kürdi	1	0
mahur	4	1
muhayyer	6	1
neva	13	0
nigriz	2	0
nihavent	1	0
nişabur	2	0
pençgâh	5	1
rast	7	0 (1)[86]
saba	6	0
segâh	10	0
şehnaz	2	0
sipihr	0	1
sultani ırak	0	1
sünbüle	1	0
uşşak	3	0
uşşak aşirani	0	1
uzzal	3	0
zengüle	0	1

Table 2

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[86] One if the dubious 227 is counted in.

	early corpus	Cantemir
berefşan	4	2 (3)[87]
çenber	4	1
darbeyn	2	2
darb-ı fetih	16	1
devr-i kebir	15	3
devr-i revan	1	1
düyek	37	0
fahte	7	0
fer'-i muhammes	0	1
frenkçin	0	0
hafif	4	0
havi	1	0
muhammes	5	1
remel	0	1
sakil	13	1
semai	7	0
semai-i lenk	0	1
zencir	1	0

Table 3

on the low side.[88] Nor is there any increase in surface complexity in 335, and the architecture of the cycle remains unchanged. But in 321 we encounter a combination of a higher level of melodic density with extensive departures from previous models of melodic/rhythmic congruence. However, the former, as an overall average, does not show a marked increase: it is, rather, the distribution which is striking, areas of rapid melodic motion being contrasted with much slower moving ones or even with a single long-held pitch (even if rhythmically subdivided).[89] Another striking example of the same technique is provided by 323, in darb-ı fetih, where the effect is to break up the cycle into blocks, each contrasting initial movement with cadential stasis.[90] The other major departure from previous norms in 321 comes in the increasingly frequent independence of the rhythmic articulation of the melody from the percussion underlay. The earlier morphology survives in e.g. Ma and H2a, but in Mb and, more insistently, in H3a the melody suggests 2 + 2 + 3 rather than 3 + (2 + 2) for the first half of the cycle. Similar contrasts appear elsewhere, as in 332 Z, which in its berefşan component is a model of orthodoxy, but one which only serves to point up the radically different nature of the preceding H2b, where the standard 3 + 3 + 2 format of the first half of berefşan is replaced by a sequential 4 + 4, each member with the same unusual rhythmic articulation. Such unorthodox passages also often constitute areas of relatively high melodic density, and it is in the combination of the two features that we find both signs of incipient retardation and an erosion of the bolder contours of the earlier formulaic language. Against the background of a different modal and rhythmic palette, they provide the most significant traits of the new style of the beginning of the eighteenth century, finding their fullest and most prophetic expression in the longer compositional spans of 280 M and, especially, the slowly unfurling paragraphs of 279.

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[87] Three if the dubious 227 is counted in.

[88] At 10 (the average over the first ten cycles) it is lower, for example, than that of 77 and 96, the first two in the control corpus, which is 11.3 and 11.3 respectively.

[89] For details see 3.6.2, tables 16 and 17.

[90] See on this piece the final remarks in 3.6.19.

4.3.3 *The seventeenth century*

If Cantemir is viewed as representing, in his more innovative compositions, the beginning of the eighteenth century, and the corpus common to Cantemir and 'Alī Ufḳī the first half of the seventeenth, the question remains of what transitional features can be detected in the interim period. Ideally one might wish to differentiate between composers mostly contemporary with and generally known to Cantemir, and an earlier generation, but the lack of secure biographical data renders the distinction hazardous, and the number of pieces that can be confidently assigned to one or the other is disappointingly small. If we look first at Cantemir's contemporaries, and especially his teachers and the other musicians he quotes as authorities, in relation to whom doubts about authorship can safely be set aside, we find the following represented in the collection: 'Alī Hoca (d. c1700),[91] Angeli (d. 1690), Eyyūbli Meḥmed Çelebi,[92] 'Iṭrī (d. 1712) and 'Oṣmān Dede (d. 1730). But if we set aside the problematic 233 by 'Oṣmān Dede and the two fragmentary later additions, 340 by Angeli and 342, the only entry attributed to 'Iṭrī, the period is poorly represented: there remain just four composers and a total number of pieces that barely equals those by Cantemir himself.[93]

For the earlier generation significant problems of attribution resurface, the major difficulty stemming from the frequent disagreements about authorship that arise between Cantemir and 'Alī Ufḳī.[94] Particularly instructive here is the case of Muẓaffer, a composer of evident importance for Cantemir, who attributes to him no fewer than 19 pieces. Of these nine are also notated by 'Alī Ufḳī, from which one might reasonably infer that he was a prominent seventeenth-century composer who had already made his mark by 1650 and was to go on to consolidate his reputation further during the third quarter of the century.[95] But while this is no doubt true, the hope that his output could stand as a major mid-century testament which would provide a number of crucial clues towards determining the direction of stylistic development after 1650 is dashed by the fact that, despite his obvious stature, it is not at all clear which pieces are actually his, for 'Alī Ufḳī positively attributes only one of these nine pieces to him: in six cases no definition of authorship is offered; and in the remaining two there are attributions to other composers.[96] If this might suggest that Muẓaffer was only just beginning to come to the fore during 'Alī Ufḳī's day, a more important and disturbing conclusion is that he was eventually to become one of the great masters whose reputations would act as magnets for pieces that were anonymous or by lesser-known composers, indeed even, in this case, for pieces by famous composers: by the time of Cantemir's collection his output had swollen to include pieces previously attributed to his equally illustrious contemporary Şerīf[97] and to the outstanding instrumental composer of the previous generation, Solakzāde (d. 1658). Nor is the problem confined to Muẓaffer, as may be seen from table 4, which also gives the pieces Cantemir attributes to Şerīf and Solakzāde, both equally well represented in the collection, and in each case details which of them are included by 'Alī Ufḳī and to whom they are attributed:

Cantemir:	Muẓaffer	5, 7, 11, 15, 24, 33, 50, 76, 113, 123, 129, 133, 142, 173, 208, 298, 303, 333, 346
'Alī Ufḳī:	Muẓaffer	11
	Şerif	208
	Solakzāde	15
	anonymous	5, 7, 113, 129, 142, 346
	[absent	24, 33, 50, 76, 123, 133, 173, 298, 303, 333]

Cantemir:	Şerif	1, 3, 4, 6, 8, 16, 18, 19, 45, 65, 66, 108, 110, 111, 134, 181, 191, 306
'Alī Ufḳī:	Şerif	3, 108
	Şāh Murād	306
	anonymous	4, 6, 16, 18, 19
	[absent	1, 8, 45, 65, 66, 110, 111, 134, 181, 191]

Cantemir:	Solakzāde	2, 20, 21, 28, 119, 149, 150, 155, 166, 179, 201-4, 272
'Alī Ufḳī:	Solakzāde	21, 119, 149, 150, 201-3
	[absent	2, 20, 28, 155, 166, 179, 204, 272]

Table 4

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[91] This is the date of death suggested for him by Y. Öztuna (*Türk musikisi ansiklopedisi*, 1, Istanbul: Millî Eğitim Basımevi, 1969), but as in several other cases where other sources are lacking this is no more than a reasonable inference from the evidence of the collections.

[92] Öztuna (ibid.) suggests that he died c. 1650, but if he is equated with the Tanburi Meḥmed Çelebi cited by Cantemir as an authority (*edvār*, p. 53) this would seem too early.

[93] One of them being, further, 23 (by Ḳuṭb-ı Nāyī = 'Oṣmān Dede), which belongs to the exceptional külliyat category.

[94] Feldman (op. cit., p. 410) is rather more sanguine about being able to identify a substantial part of what might be called the post-'Alī Ufḳī component, suggesting that Cantemir includes seventy pieces by composers of his own generation or the preceding two. But some of the names listed are represented in the 'Alī Ufḳī collection, and the conclusion also rests on the assumption that the attributions are all to be trusted.

[95] Öztuna (op. cit., II, 1974) suggests c. 1710 as the date of his death, which would point to an even longer period of productivity.

[96] But 7 and 129 are both termed *kāsebāz*, and if this is taken rather as the name of the composer (see Feldman. op. cit., p. 73) the groups become four and four.

[97] Öztuna's suggestion this time for the date of his death (op. cit., III, 1976) is the eminently reasonable c. 1680.

This suggests that the composer with the most enduring reputation, at least in terms of the stability of his output, was Solakzāde, and that if the enquiry were to be extended by a return to the vexed question of how sixteenth-century characteristics might be distinguished from early seventeenth-century ones it would seem sensible to turn to him as an exemplary representative of the latter, rather than to Şerīf, whose output is poorly represented by ʻAlī Ufḳī. But the Solakzāde corpus is also problematic, and what the case of Muẓaffer, especially, demonstrates is that we are faced with a tradition that recognized major figures from the past and held their individual creativity in high regard, but did not seem too concerned to define exactly on what basis a particular reputation should be justified. Beyond a certain threshold of fame we are faced with the paradox that it is not so much the compositions that shore up a musician's status but rather the reverse.

It is, in consequence, difficult to establish a body of work that can be accepted without question as representative of the third quarter of the century. In addition to a large pool of anonymous pieces there are a number in the Cantemir collection by composers who are not mentioned by ʻAlī Ufḳī, and it is very likely that pieces datable to this period are to be located among them, but it is by no means clear which.[98] To attempt further comparative generalizations we therefore need in the first instance to return to Cantemir's teachers and contemporaries, beginning with his teacher Angeli. As a composer he was probably not very productive, for Cantemir records only three pieces by him,[99] but for his pupil they may have been influential models.

Immediately apparent about the first, 297, is an increase in rhythmic subdivision associated with the vezn-i asgar us-sagir code, but as it is combined with a strong adherence to the basic cell divisions of çenber the effect is of the ornamentation of a generally traditional melodic line, with the greatest degree of surface complexity (as, for example, in H1/Mc and H3b) being associated with short-scale repetitions, both literal and sequential. Repetition, exact or with slight variations, is also a dominant feature of the broader structure, accounting for no fewer than five of the nine cycles in H1/M, and a similar if not greater degree of repetition characterizes the other two pieces, 304 and 315. A further and equally significant feature to be noted about the various sequential passages is how, in 304 M and Z, they override the cell structure, imposing a 4 + 4 shape over the 3 + 3 + 2 of the berefşan underlay. (It may be noted that in 227, the most doubtful of the attributions to Cantemir, similar sequences (yielding 2 + 2 + 2 + 2) occur in Mc and H2c. Interpretable as passages where his teacher's stylistic influence may be detected, they supply the one argument for thinking that the piece might be genuine: they are certainly the only justification for the label *cedīd*.)

The general impression conveyed by Eyyūbli Meḥmed Çelebi's six pieces and ʻAlī Hoca's four is quite different. In neither do we encounter Angeli's trademark techniques of repetition and the use of sequences which sometimes subvert melodic/rhythmic congruence. Melodic density may be slightly higher, but they are not markedly different from earlier models either structurally or in their formulaic preferences, even if continuity in the latter is sometimes disguised by rhythmic subdivisions: what they have in common, rather, is an element that hardly appears in the pieces by Angeli, a preference for features of modal structure, some hardly more than a detail, that mark them off as innovative in relation to the earlier corpus.[100] At the more general level of rhythmic options we again find, taking the recorded output of all three together, a preponderance of pieces (eight of the 13) in cycles of from 12 to 16 time units—only one piece is in a longer cycle—with Eyyūbli Meḥmed Çelebi showing a predilection for devr-i revan. As far as modal choices are concerned, alongside the expected appearance of some of the most common modes we encounter a higher than average use of marginal ones (acem aşiran, arazbar, kürdi, nühüft and rehavi). In these respects, then, we find a fairly strong resemblance with Cantemir's preferences. But a quite different picture is presented by the külliyat piece of ʻOs̱mān Dede, for it contains a number of modulations which, rather than forming part of the newer modal repertoire, appear to be archaic and thus contribute to the impression of a backward-looking composition.

The upshot is predictable: there are a number of features in the work of these composers that appear rarely if at all in the earlier corpus, but they are not necessarily present in any given piece, and taken individually they cannot be considered secure dating tools. Given the different backgrounds and individual preferences of composers it is in any case only to be expected that in any given period some new pieces will be more conservative than others, and as a result it is impossible on the basis of the evidence to assign the remainder of the collection to one period or another with any confidence. Caution should in any case have been inspired by previous discussions of modal developments, particularly those in saba and pençgâh, and that greater melodic density cannot serve by itself as a reliable indicator is shown, for example, by 223, which despite having the surface complexity of a late piece is nevertheless to be found in the ʻAlī Ufḳī collection. But despite all the difficulties it would be unduly pessimistic to conclude that it would be fruitless to make use of the various stylistic features discerned above in order to categorize pieces as more likely to be representative of one period than another; and that the attempt is worth making is underlined by the fact that the pieces recognized so far as securely datable account for less than half the collection.

The following, accordingly, are the pieces that may be proposed, if in some cases tentatively, as those most likely to date not merely from the second half of the century, but quite probably from the last quarter:

> 17, 24, 40, 41, 42, 89, 94, 97, 116, 213, 220, 230, 265-71, 274, 294, 296,
> 311, 319, 325, 334, 338, 339, 344 and 345.

The great majority of the remainder cannot readily be distinguished stylistically from the pieces also notated by ʻAlī Ufḳī, but it does not follow from that that they should necessarily be dated to the first half of the century. Some must be later, and a broad mid-century label would be not merely safer but surely more accurate for most.[101] If this reading of the collection is at all accurate, it means that it contains approximately 60 pieces that were definitely or probably composed during the last quarter of the seventeenth century (or in a few cases the first decade of the eighteenth), nearly all containing some evidence of compositional practice that differentiates them from the earlier common corpus. But the other pieces that 'Alī Ufḳī fails to include are more traditional in cast, and those (possibly, indeed, the majority) that date from the middle of the century onwards therefore demonstrate the continuity of a style that may well have endured until the end of the century, only gradually being displaced by the new.

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[98] They include Aġa Çengī (153), Aġa Mu'min (128, 163, 168, 199), Aġa Rıḍā (89), Baba Mest (268), Çengī İbrāhīm Aġa (57), Dervīş Meḥmed (209), Dervīş Muṣṭafā (d. 1683) (116, 190, 222, 337), Dervīş Receb (313), Ebruḳamer (93), Edirneli Meḥmed Çelebi (225), Eflāṭūn (165), Ḥacı Ḳāsim (224), İbrāhīm Aġa (212, 330), Kanbusu Meḥmed Çelebi (109, 232), Kapucı (236), Küçük Ḫaṭīb (147), Mıskali Ḫüseyn (125), Papa Zeytūn (121), Sulṭāni (51), Şeyḫ (105), Tatar İbrāhīm Çelebi (344), Tuti (311), Vāḥed 338 (=343)

[99] 297, 304 and 315. Part of a fourth, 340, is added in a later hand, but with only four fully notated cycles it is no more than a fragment. He does not record a single piece by his other teacher, Kemānī Aḥmed.

[100] 215 is in a rare mode, nühüft, marked by pitch-set complexity, and it has high melodic density but maintains melodic-rhythmic congruence; 216 and 328 show a late stage of modal development; 217 contains an unusual micromodulation in H2; 235 shows a late stage of modal development and also exhibits unusual modulations in H2b, c, d and e. The ʻAlī Hoca pieces 148, 229 and 260 also exhibit late modal features.

Of the three major mid-century figures, Muẓaffer, Şerīf and Solakzāde, it has been pointed out that only for the last do we have a reasonable level of agreement between 'Alī Ufḳī and Cantemir concerning what should be attributed to him. As one of the the most versatile figures of the age, historian, poet and painter as well as musician, it would be pleasant to suppose that he might have had his creativity as a composer recorded with sufficient abundance and fidelity for it to be possible to think, as with Cantemir and Angeli, of discerning within his work not merely the general trends of the period but also the marks of an individual style. But even here disappointment beckons, for his output, too, is problematic, if for a rather different reason: there are also, it transpires, two other, admittedly lesser, musicians also called Solakzāde, one indeed a performer on the same instrument, the mıskal, so that the possibility cannot be excluded that one or even both of them may also survive as shadowy presences, pieces by them having been lumped together with his into a single Solakzāde basket.[102]

But whether the work of one or more composers, the 15 Solakzāde pieces notated by Cantemir do have a certain consistency. The great majority of them modulate little or not at all, and introduce very few pitch-set alterations: in six pieces there are none,[103] and in most of the others very few;[104] only in 2 and 21 do we encounter in H3 a substantial modulation into a makam with a contrastive pitch set, in both cases that of the hicaz group. A somewhat similar profile is presented by the other pieces in the collection by composers identified as

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[101] The pieces in question are: 1, 2, 8, 20, 26, 28, 31, 33, 36, 39, 43, 45, 47, 48, 50-1, 53, 57, 59, 63-7, 74, 76, 79, 80, 83, 91, 93, 99, 101-5, 111, 117, 121, 123-6, 128, 130-1, 133-6, 139, 141, 144, 147, 152-3, 155-7, 159, 161-3, 165-6, 168, 171-3, 178-81, 184-91, 194-5, 197-200, 204, 206-7, 211, 214, 218-9, 221-2, 224-6, 228, 232, 234, 236, 282, 286, 288, 291, 293, 300, 303, 308-10, 314, 320, 324, 329, 330, 347-9. Less clear is the position of 38, 46, 68, 72, 84, 92, 98, 100, 109, 110, 175, 182, 209, 212, 275, 277, 298, 301, 305, 312, 313, 333, 337 and 353, which could be placed in either period. 350 and 352 are too fragmentary to bother with. The semais have not been listed, except for the last two, which give some possible signs of being relatively late: elsewhere there appear to be insufficient period indicators to attempt a stratification.

[102] The possibility is voiced by Öztuna (op. cit., III) in relation to Küçük Solakzāde: *Büyük Solakzâde'nin bazı saz eserlerinin bu zâta ait olmak ihtimali vardır.*

[103] 119, 201, 202, 203 and 272.

[104] In 28 there is a single *c*‡ and in 150 a single *b*♭; in 20 *f* appears twice and in 149 *d*♭ twice. In 166 *f*♯ and *f*‡ alternate, but only in 179 and 204 do we have two pitch changes (providing a grand total of three instances each).

performers of either the panpipes or the harp,[105] and as these are precisely the two instruments that were to disappear from the art-music instrumentarium during the course of the eighteenth century it is reasonable to conclude that the modal idiom favoured by such composer-performers reflected technical limitations which must have made it increasingly difficult for them to cope with the increasing pitch-set complexity that can already be observed towards the end of the seventeenth century. However, while the demise of the çeng could well have been caused or at least hastened by such problems the mıskal seems to have coped rather better and survived rather longer, so that there may well have been other and more significant contributory reasons for its eventual abandonment.[106]

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[105] In 15 by Aġa Çengī there are no pitch-set alterations, and in most of the other pieces (341 by Çengī Ca'fer, 57 by Çengī İbrāhīm Aġa, 114 by Çengī Muṣṭafā (but attributed by 'Alī Ufḳī to Kemānī Muṣṭafā Aġa), and 125 by Mıskalī Ḥüseyn) very few. Only in 72 by Çengī Muṣṭafā do we have a modulating section (H3b) requiring pitch changes throughout.

[106] See Feldman, op. cit., p. 154 (where Evliya Çelebi is quoted to the effect that as the harp was a difficult instrument to play it had few performers) and, especially, pp. 163-9, for a fascinating and well-documented account of the mıskal.

Appendix

5.1 *Arrangement*

Among the various topics only touched upon in passing hitherto are the composition and ordering of the collection, and the information to be gained from its indexes.

As noted in the introduction to Part i, there are three sections to the collection. In the first, the main block of peşrevs, there are 235 pieces notated by Cantemir and one marginal addition, 207, in another hand. The second consists of 30 semais (237-266). The third is more varied. It begins with five pieces in semai-i lenk, followed by three in another hand (two semais (272 and 273), and a peşrev (274) on an unnumbered page) and then a further 64 peşrevs notated by Cantemir followed by a final 15 in other hands. The number of items notated by Cantemir himself thus totals 335.

In the light of the fact that, setting aside the highly dubious 227, all the Cantemir pieces occur in the third section (the next is 278), as do those of his teacher Angeli (the first being 297), it might be suggested that one of the organizing principles of the collection was chronological, pieces by earlier masters being more likely to be found towards the beginning, with contemporary or recent pieces tending to appear later. But it has been suggested in 4.3.3 that some relatively recent pieces are to be found in the first section, and it is certain that some pieces from the earlier corpus (that also recorded by ‘Alī Ufḳī) appear in the third, so that this cannot have been an overriding principle. Of the other factors that came into play one was no doubt access: certain pieces that Cantemir had heard of only became available after much of the collection had been assembled. But where he was able to order a large amount of material various chains of associations came into play. The most obvious is the genre distinction between peşrevs and semais, but within each there are groupings according to mode (or, in some cases, clusters of related modes),[1] and within the former there may also be groupings according to rhythmic cycle,[2] composer, genre, and *naẓīre* pairings.

In the following list these will be coded as:

C composer G genre M mode N *naẓīre* R rhythmic cycle

/ indicates a break between two pieces not linked in any of these ways.

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[1] For example, it cannot be fortuitous that pieces in hüseyni and muhayyer are often juxtaposed, or that there is a sequence involving rast, pençgâh and rehavi.

[2] In addition the juxtaposition of pieces in the same cycle one may note that pieces in muhammes and düyek often appear side by side.

1-21 R 1-4, 5-6, 7-9, 10-11, 12-14, 19-20 M 3-4, 18-19, 20-21 C
21-23 M 22-23 G (M)
22-24 R 23-4 N
24-25 M
25-30 R 25-26 M C
30-35 M 32-33 R
34-40 R 36-38 M 36-37 N
40-41 M/
42-43 R
43-45 M
44-50 R/ 46-48 M
51-57 M 51-56 R
57-62 R 59-60 M
62-72 M/ 63-67 R 65-66 C
73-91 M/ 73-74 C 74-75 R 76-77 R 78-80 R 80-81 N
83-88 R 90-91 R
92-96 M 92-93 R
96-98 R
97-99 C/ 98-99 M
100-102 M/
103-108 M 103-4 R 105-107 R
108-111 R/ 109-110 M 110-111 C
112-114 M/
115-116 M
116-122 R
120-128 M
124-129 R
129-134 M/ 130-132 R 133-134 R
135-143 M 135-136 R 138-139 R
142-144 R
144-146 M/
147-148 M
149-153 M 149-150 C 152-3 R
154--156 M 155-156 R/
157-158 M R N G/
159-162 R
162-163 M
163-165 R
165-168 M/
169-170 M
170-172 R
171-173 M/
174-183 M 174-5 R 176-7 R

182-186 R
186-187 M/
188/
189-190 M/
191-193 M R/
195/
196-199 M/ 196-197 R
200/
201-204 C M/
205/
206-[207-]208 M/ 206-[207] C
209-211 M
211-212 R/
213-4 R/
215-217 C/
218/219/220/
221-226 M/ 224-225 R
227/228/229/230/231/232/233/
234-235 M/
236/
237-266 R G 237-245 M 247-249 M 250-254 M 258-259 M 260-261 M 262-263 M
267-271 R G/ 267-268 M
275 M/
276/
277-278 M R N
278-281 C/
282/283/
284-285 C/
286/
287-289 M
289-290 C/
291/292/293/294/295/296/297/
298-299 M
299-301 R 300-301 M/
302/303/304/
305-307 M
307-309 R
308-310 M/
311/
312-313 M/
314-315 R/
316/
317-319 M/

320/
321-322 R/
323/324/325/
326-327 R/
328/329/
330-331 M
331-332 C/
333/
334-335 M
335-336 C/
337/338/339

As this shows, it is not until piece 42 that the overlapping series of connexions between pieces is broken, but thereafter such ruptures appear with gradually increasing frequency. However, up to 187 there are usually strings of between 10 and 20 interconnected pieces, and it is reasonable to conclude that the coherence of the organization points to this material having been assembled in advance, so that in all probability we have here a combination, but in proportions that could only be guessed, of Cantemir's own basic core repertoire learned from his teachers together with other pieces that he could readily acquire from the musicians with whom he was most closely associated. For the remainder of the peşrevs in the first block disjunction is the norm, which suggests rather the piecemeal addition of whatever new pieces he could obtain before going on to write out the second coherent block, that of the semais. Thereafter we again have a rather random and motley selection of new additions including, importantly Cantemir's own pieces and those by his teacher, Angeli, but with even the latter being scattered.

5.2 *Pairs*

There are in all eight pieces in the collection which appear twice: 61/330, 125/309, 134/298, 144/307, 214/291, 218/282, 331/351 and 338/343. Although in the last two cases the second version has been added in another hand, quite possibly by someone unaware that the piece had already been included, it is otherwise to Cantemir himself that we owe the duplication (so that the number of different pieces notated by him amounts, finally, to 333). But even here the repetition is never exact, and the resulting discrepancies, even where rendered possible by and largely attributable to the choice of a different notational code, are of considerable interest. A further variant to be considered in this context is the second version of 197 H3 added in the margin.

The first and most obvious question is why Cantemir should have notated six pieces twice. For once, this may be answered fairly readily: with 144/307 and 214/291 the identification in the headings is in both cases the same, but for the other four pairs it is not: 61/330 and 125/309 are each assigned to different modes, 61/330 and 134/298 to different composers, and 218/282 to different rhythmic cycles. This suggests as an initial reaction that in the cases of 144/307 and 214/291 a second notation was probably included inadvertently, and that mistaken identity combined with a lack of cross-referencing would account for the others. But the evidence of the first index leads to a slightly different conclusion, for it suggests that in five of the six cases Cantemir was simply not aware, when notating the second version, of its identity with the first. We are dealing here with five pairs the first member of which was a composition known to Cantemir at the time the index was compiled, while the second was not: in every case he had only heard of it in another guise, so that he must have assumed that it was a quite different composition.[3] It therefore seems clear that when he eventually located it he failed to check it against the previous body of notations, and that with its different identification the apparently new piece failed to jog his memory. Such an interpretation accords with, indeed reinforces, the conclusion reached above that the first block of peşrevs does not consist straightforwardly of a record of Cantemir's own repertoire as a performer but also incorporates the results of an active process of enquiry and acquisition, so that it contains a number of pieces collected from authorities immediately available to him but either never or only temporarily incorporated into his own active repertoire. It would also follow that the compilation of the first index may be associated with the stage in the compilation of the collection represented by the first two blocks:[4] much of what will be eventually be included in the third is listed in the *nā-mevcūd* column: it had been heard of, but not yet traced. With the sixth pair, on the other hand, the index entries in the two columns are the same, so that in this case the most likely explanation for the repetition is that as the title of 214, murassa', was not unique to it,[5] Cantemir concluded from the authority he had consulted that there could also be a second rast piece with this title.

But these duplications provide more than insight into the compilation of the collection and the nature of its contents. The lack of unanimity in their headings suggests, fairly obviously, both a certain flexibility of attribution and a degree of ambiguity in modal and rhythmic perceptions. Account has already been taken of the latter, and attention will be turned here to the evidence supplied by the variations between the two notated forms. Indeed, even where, in the single case of 144/307, both versions are by Cantemir, there is no difference in the code used and the number of variations is small, these are still instructive and, as ex. 1 shows, provide evidence for standard techniques of elaboration and support some of the conclusions previously reached about the grouping together of various pitch contours under the rubric of a single formulaic family. To be noted also are occasional equivalences between *B*♭ and *d*♭ in 307 and *B*𝄳 and *d* respectively in 144, which suggest that as well as being a later addition, 307 might represent a slightly later perception of modal norms in ırak and saba.[6]

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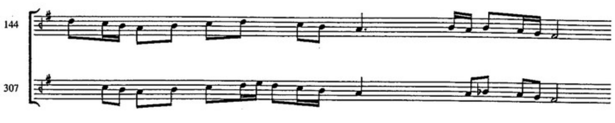
[3] Even in the case of 144/307, where in the collection both notations have the same mode, rhythmic cycle and composer, the index (p. 105) still provides different entries: 144, in the *mevcūd* column, is listed as küçük sakil, while 307, which is in the *nā-mevcūd* column, is identified as Papa sakili, so that the most likely explanation in this case is that Cantemir had heard of what he presumed to be a second sakil piece by Papa (since it was not called küçük).

[4] It is not, however, directly derived from the the first block of the collection, for the order of the entries does not always coincide.

[5] It is also applied to 135.

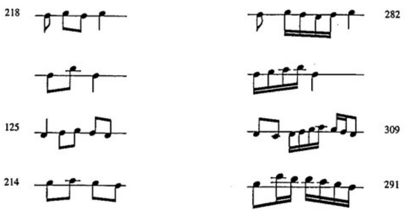
[6] The opposite occurs at the beginning of H3, where we find *d*♭ in 144 and *d* in 307, the latter presumably to be interpreted as a suppression of an initial modulatory gesture that is not carried through, the result being a straightforward descending sequence in ırak.



Example 1

But it does not follow from this we can assume a clear line of development from 144 to 307: such differing views of modal identity coexisted within the repertoire of Cantemir's day, and as a further pointer it may be observed that the variations in melodic complexity between the two versions are by no means unidirectional: just as a version recorded by ʿAlī Ufḳī may sometimes exhibit greater surface complexity than one by Cantemir, so too here the earlier notation sometimes contains more pitch changes than the later, and in ex. 1 the greater degree of elaboration appears first in one version and then in the other.

In all the other pairs the two versions are notated in different codes. The vezn-i sagir and vezn-i asgar us-sagir codes permit greater precision in terms of rhythmic subdivisions, and one quite consistently maintained contrast is that when the vezn-i kebir code (which cannot reproduce dotted rhythms where the shorter duration is less than a time unit) has a sequence of five attacks with the first four of equally spaced (e.g. ♫♩ ♫♩ ♩), the other two codes begin with a dotted rhythm (♫♩ ♫♩ ♩), so that even if not quite suggesting a consistent application of something akin to the principle of *notes inégales*, it is clear that this contrast sheds light on one area where the limitations of the vezn-i kebir code used for the first and largest block of pieces regularly distorted normal performance practice.[7] But if the other codes allow greater accuracy, there are instances where all or part of the more complex surface represented in them could equally well have been notated in the vezn-i kebir version, so that we have e.g.:



Example 2

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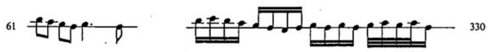
[7] Similarly, where the vezn-i kebir code has semiquavers, the equivalent vezn-i asgar us-sagir notation will frequently have a dotted beginning.

and it is with variation of this kind that should be classified the version of 197 H3 added in the margin.

In fact, such differences have already been encountered between the first and second statements of the same material within a single vezn-i kebir piece, and the evidence of the alternative notations serves on the one hand to confirm that they are to be regarded as nothing more exotic than variants of a single formulaic family and, on the other, that within the agreed confines of the formula in question the performer was probably free to substitute one variant for another. Accordingly, one would expect that the most distant formulaic relatives would appear in the pair (134/298) notated in the two registers that are furthest apart, vezn-i kebir and vezn-i asgar us-sagir, but in the event these two versions are quite close to each other, the main differences between them being in rhythmic values; it is rather in 61/330 that we find such equivalences as:

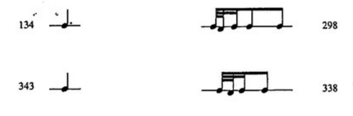


Example 3

which illustrate well enough something of the range of realizations available for each formula. Indeed, it is precisely on the basis of such material that it might be possible to conceive the outlines of a grammar of performance realization, although it would also need to take account of material more complex than that exemplified so far.

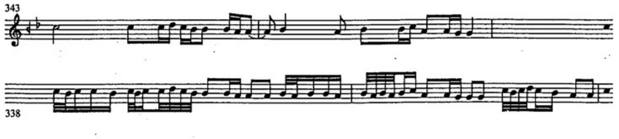
Similarly standardized are certain small-scale rhythmic/melodic features where invocation of the concept of ornamentation would seem to be justified, on the ground that what is present in one code is consistently omitted in another, thus pointing to a conceptual level at which the absent feature was not deemed crucial to the identity of the melody. If such omissions only occurred in the pairs notated by Cantemir one might hypothesize that they are to be regarded not as representing a general perception within the culture but as a purely personal form of graphic shorthand; but even if that were the case it is still not without significance that he felt he could provide an adequate notation through the medium of a code that precluded certain possibilities of rhythmic subdivision and hence also of melodic detail, and corroboration that such details were not regarded as an indispensible part of the basic structure is provided by the fact that parallel omissions are also to be found in one of the pairs where the later version has been added subsequently in another hand, and thus embodies the perceptions of someone else who likewise thought that the vezn-i kebir code could supply a perfectly adequate representation, in this case of a piece for which Cantemir had actually preferred the vezn-i asgar us-sagir code.

We may thus compare equivalences between 134 and 298 with others between 343, the later entry, and 338:



Example 4

But the beginning of 343 and 338 Mc also supplies a more complex example:



Example 5

in which exactly the same form of initial embellishment is not only repeated but combined with a rhythmic displacement that results in a different mapping of melody on to rhythmic underlay that lasts until the original relationship is restored in the following cycle. It may well be imagined that such transformations, unless inhibited by the norms of the melodic-rhythmic relationship of the cycle in question, could have happened quite frequently, either as a positive result of creative variation or in compensation for a lapse of memory. But although other examples could be cited,[8] the evidence of these pairs does not point strongly in this direction: differences in surface detail for the most part fail to mask a considerable degree of fidelity in the later version to the melodic contour of the earlier.

This is not to say, however, that there are no dramatic contrasts. A more drastic case of reordering and rhythmic displacement is offered, for example, by 61/330, where the latter exhibits extensive reworking (of both H2a 1-2 and H3a), and in 218/282 where, despite the lack of any significant melodic change, realignment goes beyond the confines of the subsection, the beginning of 218 Md becoming the end of 282 Mc. But it should not be assumed that such transformations, however motivated, are always the result of a simple linear process of transmission, and evidence of a more complex relationship is provided by 61/330, a piece that had earlier been recorded by ʻAlī Ufḳī, reference to whose version shows that the occurrence in 330 of a varied repeat of the first cycle of Ma in 61 is not an addition but a preservation, presumably through a different line of transmission, of an earlier form in relation to which it is the abbreviation in 61 that is the innovation. Nor should this kind of relationship be thought unusual: from the situation revealed by Cantemir's index, namely that in these cases the elusive compositions for which he was hunting were actually second versions in disguise, being assigned to a different composer, mode or rhythmic cycle, a logical conclusion is that what have been termed the earlier and later notations do not actually signal earlier and later forms: the temporal distance between the two notations may well have been very short, and certainly insufficient to generate the more significant differences between them, so that they cannot be thought to illustrate the transmission history of a given piece. The distance is in fact more spatial than chronological, the pairs consisting, rather, of contemporary versions in the repertoires of musicians variously close or distant to Cantemir, and the contrasts between them are those generated by different lines of transmission.

It is in such a context that we can understand more readily that while much is virtually identical between one member of a pair and the other, they also sometimes exhibit differences that transcend the merely cosmetic. Thus 144/307, of all the pairs the closest in the sense that they are notated in the same code by Cantemir himself, reveal a major contrast in what is in effect the recomposition of H2, where the same material is set a third lower in 307, thus abandoning the prominence of *f*♯ and the consequent modal switch to eviç for *d* and a closer relationship with neva. An even more striking change is to be found in 214/291, where corresponding to 214 H2d (a slightly varied repetition of the second half of H2c) are two subsections, 291 H2d and e, with quite different material, and there is, further, a reordering of H3b and c, together with some recasting.[9] But it is in 61/330 that the formal structure exhibits the most radical divergences, even if beyond the areas already noted the material remains largely the same: the sections of 330 correspond to the material in 61 as follows (the bracketed element being absent from 61):

330	H1	M	H2	Z	H3
61	H1a+b	Ma+b	H2a	H2b+c	H3a[+a']+b

and if we also take into consideration the markedly different structure of the ʻAlī Ufḳī version it is difficult to avoid the conclusion that the existing notational record of this piece may reflect not two but three lines of transmission.[10]

A further point illustrated by a comparison of 214 and 291 concerns variations in the tempo and distribution of material, at least in düyek. Whereas most of the material corresponds exactly in these two versions, the 15 cycles of 214 M are compressed into the eight cycles of 291 Ma, in other words over this stretch, one half cycle apart, material appears at twice the speed in 291 relative to 214, before converging again in 214 Mc=291 Mb. Although such a change of gear could hardly be used by itself to justify, say, offering 84b as an alternative to 84a, it does at least point to the possibility of conceiving the same material at markedly different tempi.

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[8] As an example of the latter it is tempting to cite 218/282 H2, where 282 has only tedious repetition to offer in place of the at least minimally contrastive jump to *d'* in 218 H2b.

[9] Not unexpectedly, there are also a number of lesser contrasts: thus while the seconda volta ending of Ma in 307 is quite similar to the ending of Ma in 144, the prima volta ending is not, cadencing on *c*; and to the descending phrase from *d* in the second half of 218 Md 3 corresponds in 282 Me 1 a descending sequence from *g*.

[10] For the details see the notes to 61 in Part i. That the ʻAlī Ufḳī version is distinct from the other two is shown most obviously by the fact that it omits 61 H2c, which is included in 330 Z.

5.2.1 *Indexes*

Some insight into the information to be gathered from the indexes may be gained both from the above and from the discussion in 4.3.4.1 of the problems surrounding the identification of Cantemir's own compositions. They deserve, however, more extended consideration, and it should be stressed that the following supplementary remarks merely scratch the surface.

An index is never innocent, but always embodies choices and emphases. Those that lie behind the first and most extensive of Cantemir's three will already be apparent: it is not, properly speaking, an index of the collection but of a wider project, the delineation of a repertoire that also included the heard but not yet learnt and even the unknown but only heard of, so that it allows the notations as they stand to be identified as, precisely, a collection, the substantial but still incomplete yield of a continuing search. Sometimes, as has been seen, what was thought be unknown turned out to be no more than a relabelled variant of a piece already included, but the presumption must be that such cases constitute the exception rather than the rule. It is most unlikely, for example, that an unknown piece identified as in nişabur and darb-ı fetih could be another such doublet: nişabur is a quite distinctive makam, and none of the three nişabur pieces that Cantemir notates is in darb-ı fetih, an equally distinctive cycle; and proof that at least some of the unknown pieces were not doublets is supplied by the Kevs̱erī collection where, for example, we find in addition to the four acem aşirani pieces notated by Cantemir a further acem aşirani piece in devr-i kebir, attributed to Kanbusu,[11] which matches exactly one of Cantemir's unknown entries. As there are several other such matches it is reasonable to conclude that in fact many, and possibly even the great majority, of the 130 pieces in the *nā-mevcūd* column of the first index that he failed to locate would have been true additions to the collection, in other words that the number of instrumental pieces in circulation was closer to 450 than 350.

As expected, the profile of the missing 130 is not dissimilar to that of the collection. But although we find a broad match between the incidence of the modes and rhythmic cycles in both, as table 1 shows, there are also some striking differences. Among the modes, for example, the expectation that hüseyni should be by far the most frequent is not fulfilled, while ırak, one of the five most common modes in the collection, does not appear among the corresponding nine listed for the remaining 130 (sinking in fact to joint thirteenth place). It is also rather surprising to find rast at the tail of the field, and especially that there are more examples of nigriz. Among the rhythmic cycles, likewise, there are a number of surprises, even if eight of the most common nine cycles in the collection (semai excluded) appear among the most common nine among the 130. The relatively low position of devr-i kebir may be misleading, as some of the further five pieces with the abbreviated heading 'devr' should be assigned to it, but one might have predicted a greater number of pieces in darb-ı fetih and, above all, muhammes, of which there are only three instances as against the 18 of the collection.[12] On the other hand, evsat achieves an unexpectedly high ranking, and to be noted also is the presence of two pieces in hezec, a cycle which fails to make a single appearance in the collection.

neva	19	(33)	düyek	24	(82)
hüseyni	17	(49)	sakil	18	(36)
acem	12	(22)	berefşan	12	(17)
beyati	10	(11)	çenber	8	(17)
segâh	9	(22)	fahte	8	(24)
eviç	6	(9)	devr-i kebir	7	(40)
nigriz	6	(5)	evsat	6	(3)
mahur	5	(9)	darb-ı fetih	5	(26)
rast	5	(25)	hafif	4	(13)

(The first figure gives the incidence among the 130 unrecorded pieces, the following one in brackets that in the collection.)

Table 1

Beyond such correlations of mode and rhythmic cycle lies the third potential element for comparison, the identity of the composer. As expected, most are familiar from the collection, but there is also a sprinkling of new names, one or two of which will recur in the Kevs̱erī collection. Occasionally the presence of a name in the *nā-mevcūd* column may even indicate something about Cantemir's relationships with other musicians: ‘Iṭrī, for example, is quoted as an authority in the *edvār*, but is only represented by a fragment in the collection and one other piece which was unknown to Cantemir, while the composer of a further such piece, surprisingly, is Angeli.

Less has been said hitherto of the second index. The main reason is that it conveys rather less information; indeed, it would be more accurate to describe it as an abbreviated inventory: it gives no page references and concerns itself not with individual pieces but with categories, entering for each mode the number of pieces that occur in each rhythmic cycle. To take just one example, the entry for eviç reads darb-ı fetih 1, sakil 2, düyek 5, devr-i kebir 2, devr-i revan 1, berefşan 1, hafif 2. Reference to table 1 shows that the total of 14 corresponds not to the contents of the collection, but to the total repertoire of *mevcūd* and *nā-mevcūd* pieces in index 1. Ignoring the two semais in the collection (which are not taken account of in either index), we have a total one higher than the sum of the two columns in table 1, and the discrepancy demonstrates that index 2 must have been compiled before the final amendments to index 1, which include striking through the entry for a *nā-mevcūd* piece that had been located but assigned to another makam.

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[11] The contents are listed in E. Popescu-Judetz, *XVIII. yüzyıl yazmalarından Kevserî mecmuası üstüne karşılaştırmalı bir inceleme*, Istanbul: Pan Yayıncılık, 1998 (the four common pieces are on p. 29, the further one on p. 40).

[12] It is possible, however, that one or two of the düyek pieces would, if found, have been reassigned to muhammes. Hesitation between the two seems to continue, for in the Kevs̱erī collection we find two pieces in muhammes that correspond exactly to two of Cantemir's *nā-mevcūd* pieces in düyek (one in segâh, ascribed to Avurdu Delikli, the other in neva, ascribed to Baba Zeytūn (ibid., p. 42)).

The main body of the third index, which again fails to give page references, is also organized according to makam; it gives for each a composite list of peşrevs correponding, but not identical, to that in index 1. Taking once more the eviç entry as an example, we find that certain items do not quite match: thus the composer of the one piece in berefşan is identified in 1 as Mıskalī Aḥmed Çelebi, but in 3 as Mışırli Kemānī Aḥmed Çelebi, while another piece that in 1 (and the collection) is in düyek is assigned in 3 to muhammes. Further, the total in index 3 is 12 as against the original 14 of index 1, and it includes the item that would later be struck through in index 1. However, the two missing items are not from those in the *nā-mevcūd* column, nor are they late additions to the collection, so that their absence is difficult to explain unless the compilation of index 3 preceded that of index 1 (and the collection): it would thus represent a first attempt at an inventory of peşrevs that was later to be enlarged in index 1. But whatever the relationship between the two, index 3 is noteworthy for being the only one to add, in the margin, a listing of the semai repertoire. The total is 93, considerably in excess of the 33 in the collection, with no fewer than 14 cited for hüseyni. Further, whereas the headings to the semai notations only rarely identify the composer, the marginal entries in index 3 are rather more forthcoming. By far the most prolific, if the attributions are to be trusted, was Zurnazen İbrāhīm Aġa, credited with no fewer than 16, followed by Solakzāde with eight. In addition, several anonymous semais are characterized as *'acemī*, others simply as 'old' (*kühne*).

Another difference between index 3 and the other two (and one which may be taken as a further pointer to its being the first to be compiled) is to be found in the order in which the modes are presented. Index 3 begins with rast, and although a number of related modes are clustered together there appears to be no particular logic about the overall order. Indexes 1 and 2, however, are articulated according to the categories set forth in the treatise: they begin with the main-note modes, rising step-by-step from ırak to muhayyer (omitting the problematic or non-existent dügâh and gerdaniye), and then proceed with the secondary-note modes, starting again with a low-register mode, acem aşirani, rising step-by-step to sünbüle and şehnaz, and then descending gradually to nigriz and pençgâh,[13] followed by miscellaneous marginal entries.

5.3 *'Alī Ufḳī and Cantemir*

Mention has already been made of the various problems that surround attribution, so that as well as a transmission history it would be appropriate in certain cases to speak of an attribution history, but understood more widely to comprise not only changing views of who the composer was but also of such matters as modal and rhythmic identity. How frequently pieces might be reassigned in one respect or another may be seen from the fact that of the 120 pieces common to 'Alī Ufḳī and Cantemir the headings of no fewer than 64 fail to coincide exactly.

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[13] There is thus a broad arch in which the dominant secondary notes appear in the following order: ascending *B♭, B, d♭, e♭, f, b♭*; descending *g♯, f♯, d♯, c♯, B*.

The following list includes not only those pieces where there is a disgreement, but also ose where one of the two sources omits an entry equivalent to one provided by the other. A ıgle entry is one found in both; where there are two the 'Alī Ufḳī entry precedes:

	Composer	Mode	Rhythmic cycle
3	Şerīf	rast/pençgâh	darb-ı fetih
4	— /Şerīf	mahur	darb-ı fetih
5	— /Muẓaffer	segâh	darb-ı fetih
6	— /Şerīf	segâh	darb-ı fetih
7	Kāsebāz[14]/Muẓaffer	ırak	darb-ı fetih
9	— /*'acemler*	eviç	darb-ı fetih
10	Şāh Murād/ —	hüseyni	darb-ı fetih
13	Sütçüzāde/*'acemler*	saba	darb-ı fetih
14	Frenk Muṣṭafā/Meḥmed 'Alī	saba	darb-ı fetih
15	Solakzāde/Muẓaffer	uzzal	darb-ı fetih
16	— /Şerīf	buselik	darb-ı fetih
18	— /Şerīf	acem	darb-ı fetih
19	— /Şerīf	uşşak/neva	darb-ı fetih
22	— /Hārūn Yahūdī	acem/hüseyni	düyek/fahte
25	— /Ḥasan Can	hüseyni	düyek
27	— /*'acemler*	rast/pençgâh	çenber/düyek
29	— /*'acemler*	uzzal	düyek
32	Ḥammālī/ —	ırak	fahte
34	Seyf el-Mıṣrī	ırak-ı muhalif/ırak	düyek
41	Kemānī Muṣṭafā/ —	sünbüle	devr-i kebir
44	'Alī Beg/ —	neva	berefşan
49	—	acem/arazbar	berefşan
54	— /Behrām	beyati/neva	devr-i kebir
55	— /Aḥmed Beg	neva	devr-i kebir
58	Şerīf/Nefīrī Behrām	beyati	fahte
61	Nefīrī Behrām	hüseyni/arazbar	fahte
62	Küçük Aḥmed Beg/ —	neva	fahte
69	Şāh-i Huban	uşşak/neva	muhammes/düyek
70	—	— /neva	— /muhammes
71	—	uşşak/neva	düyek
73	Şāh Murād	hüseyni	nim sakil + sakil + fahte + berefşan + — / — + çenber + fahte + berefşan + semai
75	'Alī Beg/Büyük 'Alī Beg	muhayyer	düyek

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ccepting, here and below, Feldman's identification (op. cit., p. 73) of this name as that of the composer than the title of the piece.

77	Melek Can	hüseyni	düyek/çenber
81	Ferruḫ	hüseyni/muhayyer	devr-i kebir
95	— /*'acem*	saba	devr-i kebir
96	— /Edirneli Aḥmed	saba	çenber
98	Solakzāde/ Zurnazen İbrāhīm Aġa	beyati/uşşak	çenber
112	Süleymān Dervīş	aşiran buselik/huzi aşiran	düyek
113	— /Muẓaffer	buselik aşirani	— /sakil
114	Kemānī Muṣṭafā Aġa/ Çengī Aġa	buselik aşirani	hafif
115	— /Kemānī Muṣṭafā	nihavent	düyek
118	Şāh Murād/ —	uzzal	devr-i kebir
120	Ḥasan Aġa	rast/pençgâh	devr-i kebir
127	— /Papa Ferruḫ	rast	sakil
129	Kāsebāz-i Mıṣrī/Muẓaffer	ırak	sakil
137	—	acem	— /muhammes
142	— /Muẓaffer	acem	sakil
145	— /Zurnazen İbrāhīm	eviç	hafif
146	Dervīş 'Ömer/Ẕākir	eviç	sakil
151	— /Mustaḳīm Aġa	acem	darbeyn
158	varsağı	muhayyer/baba tahir	devr-i kebir
160	Solakzāde/*hindī*	nişabur	sakil
164	— /Şāh Murād	hüseyni	düyek
205	Emīr-i Ḥac/ —	neva	hafif
208	Şerīf/Muẓaffer	mahur	sakil
210	—	uzzal/şehnaz	düyek
287	—	rast/mahur	düyek
292	—	acem	fer'/muhammes
295	Dervīş Şehlā Ḥasan Çelebi/ —	rast/pençgâh	düyek
306	Şāh Murād/Şerīf	ırak	berefşan
307	— /Papa	ırak	sakil
316	'Oṣmān Paşa al-'Atīḳ/ 'Oṣmān Paşa	dügâh-hüseyni/ hüseyni	düyek muhammes
346	— /Muẓaffer	nigriz	sakil
347	— /Karaoğlan Serrāczāde	beyati	evsat

There are thus 25 pieces ascribed to a composer or category (e.g. *'acemī*) by Cantemir for which 'Alī Ufḳī provides no information (as against eight the other way round). This does not of itself demonstrate a process of reattribution, but there is certainly plentiful evidence for such a process in the twelve cases where each authority gives a different composer or category. There are also several instances where the mode heading is not the same. Some

point to a theme that has been discussed previously, that of modal overlap, in these cases sufficient to allow alternative perceptions of identity; others suggest, rather, an increasing preference towards the end of the century for a more precise and differentiated modal nomenclature, so that what previously was a complex with several strands placed under a single rubric now tends to have each strand named separately. In the domain of rhythm, finally, one may note the fluctuating boundary between düyek (8 time units) and muhammes (16), and the equally predictable alternatives muhammes and fer' [-i muhammes]; but there are in addition some rather unexpected differences of interpretation, with one piece being various analysed as in a cycle of 8 (düyek) or 10 time units (fahte) and two as in a cycle of 8 (düyek) or 12 (çenber).

5.4 *The Cantemirian corpus*

Some of these problems, not surprisingly, also affect Cantemir's own output, although here it is not so much a question of disputed authorship as of deciding which of the pieces now attributed to him are more or less likely to be authentic. As argued in 4.3.4.1, the collection contains:

four pieces for which Cantemir himself provides evidence of authorship (by referring to the composer as *ḥaḳīr*):

279	buselik aşirani	berefşan
280	geveşt	sakil
281	bestenigar	berefşan
284	geveşt	semai[-i lenk]

eleven which Cantemir refers to as 'new' pieces, and may be accepted as authentic:

278	ısfahan	remel
285	muhayyer	muhammes
289	mahur	darbeyn
290	sultani ırak	devr-i kebir
302	zengüle	devr-i kebir
321	pençgâh	devr-i kebir
323	uşşak aşirani	darb-ı fetih
331	beyati	çenber
332	büzürk	darbeyn
335	buselik	devr-i revan
336	sipihr	fer'-i muhammes

two dubious attributions:

227	rast	berefşan
271	buselik aşirani	semai[-i lenk]

Of these, Feldman's list (op. cit., p. 373) includes 227, but as it is only of peşrevs it omits

284 and 271, which are, however, recognized by Popescu-Judetz.[15]

In addition, there are a further three pieces in the collection that have been accepted as authentic (the first two by both Feldman and Popescu-Judetz, the third only by Popescu-Judetz):[16]

198	hüseyni	sakil
310	rast	düyek
339	acem yegâhi	berefşan

However, their status is disputable at best, and neither in the heading nor in the indexes is Cantemir mentioned as the composer.[17] The case for 198 appears to be based solely on the fact that the epithet *cedīd* is attached to it in index 1. But in the previous cases the presence of *cedīd* reinforces the presence of Cantemir's name in the heading, and here it does not; and it may further be observed—quite apart from the fact that 198 is nearly as far removed stylistically from the main block of Cantemir pieces as is 227—that it is atypical in that the crucial index entry is not, like all the others, added at the end of a column, but occurs in the body of one as the last member of an internal sequence of sakil pieces, so that we have the entry for 89, by Aġa Rıḍā, followed simply by *diğer s̱aḳīl-i cedīd* ('another new [piece in] sakil'), and as the piece by the otherwise unknown and undatable Aġa Rıḍā contains features that would make plausible a late seventeenth-century date, so that it too would be relatively new, it could be argued quite plausibly that the following index entry for 198 should be taken literally. A late date for 89 would go against the general trend of the early part of the collection, where early pieces predominate, but it is certainly not disqualified by its position, as a number of later pieces do seem to be included in the first block. A slightly stronger point is that the position of 198, if by Cantemir, would go against the general clustering of his pieces within the second group of peşrevs.

If the case for 198 is shaky at best, that for 310 and 339 appears to be non-existent. The entry for 339 in index 1, the only one on which it appears, simply says berefşan; it is not qualified as *cedīd*; and stylistically it is not very close to Cantemir's other berefşan pieces. As for 310, the entry in index 1 is placed in the middle of the *nā-mevcūd* column, so that it could not have been a late addition tacked on indifferently in either column, as suggested for others; it is not qualified as *cedīd*; there is no reference to Cantemir anywhere, and certainly not to *ḥaḳīr* in the index 3 entry; and there are no features of style to press a claim for affinity. Discarding these three leaves, then, 14 peşrevs, one semai, and the doubtful 227 and 271. But these obviously do not constitute his complete œuvre. Reference has already been made to two further entries in index 3 for compositions not included in the collection, and mention has also been made of a semai that he presented to Sultan Aḥmed III on his appointment to the throne of Moldavia in 1710, so that these further three may be added:

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[15] E. Popescu-Judetz, *Dimitrie Cantemir: cartea sţinţei muzicii*, Bucharest: Editura Musicala, 1973, p. 136. However, Feldman does (op. cit., p. 468) recognize 257, a semai in neva, as being by Cantemir.

[16] ibid., p. 133. For Feldman's list see op. cit., p. 373.

[17] The same doubts about 339 are expressed by Feldman (op. cit., p. 516), who adds the suggestion that the attribution may stem from Kevs̱erī. However, the contents list supplied in E. Popescu-Judetz, *XVIII. yüzyıl*, contains nothing in acem yegâhi.

buselik aşirani	semai
geveşt	çenber
neva	semai[18]

thus giving a total, assuming all except 227 and 271 to be genuine, of 18. He may well have composed more, and the modern repertoire certainly contains a considerable number of other items attributed to him. Öztuna, for example, lists a total of 36 pieces, while Popescu-Judetz adds, in addition to those already rejected as probably spurious, the following (the numbers relate to her list):[19]

peşrevs:

21	*buselik aşirani	berefşan
22	*buselik aşirani	berefşan
23	*ısfahan-i cedid	remel
24	neva	fahte
12	nihavent	devr-i kebir
25	*pençgâh	devr-i kebir
26	*rast	düyek
27	rehavi	sakil
28	sazkâr	havi
29	uşşak	darb-ı fetih

semais (all in the semai-i lenk rhythmic cycle):

31	*buselik-aşirani
30	*buselik-aşirani
32	neva
33	nihavent
34/35	pençgâh
36	rast
37	rehavi
38	uşşak
40	nişaburek[20]

other:

39	beste in nişaburek
41	*'acem ṭarab* I
42	*'acem ṭarab* II
43	*Air de Cantemir* (Fonton)

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[18] It is perhaps for this reason that Feldman accepts 257 as a Cantemir piece: but neither the collection nor the third index offer any corroborative evidence.

[19] *Cartea*, pp. 133-8 (list), pp. 305-408 (notations). Among the 36 items listed by Öztuna (op. cit.) there are three semais (in ısfahan, sultani ırak and sultani neva) not included by Popescu-Judetz.

[20] Mistakenly identified as nihavent in the heading.

Of these the last can be dealt with without difficulty: it is a somewhat elaborated version of 281,[21] and similar relationships may be detected in at least some of the cases marked *, for all have the same mode and rhythmic cycle as other Cantemir pieces. Particularly clear are the first two, Popescu-Judetz' *21* and *22*, both of which, in differing degrees, are elaborated versions of Cantemir's 279, in buselik aşirani and berefşan. Again, *23* is an elaborated version of Cantemir's 278, as is *25* of Cantemir's 321.[22] (*26*, on the other hand, has nothing in common with 310, which is anyway in all probability not by Cantemir.)[23] Such doublets (or triplets) juxtapose the results of aural transmission, possibly through different channels and recorded at different stages, with the evidence of the composer's own notations, and thus not only provide invaluable testimony to the active rôle of teachers and performers as they subtly enrich and inflect the inherited repertoire but also raise interesting questions about identity and authorial ownership: they suggest that rather than solemn re-enactment, performance could be a creative as well as recreative activity, so that for the composer—and especially one like Cantemir, poised at the beginning of a period of change—each piece would, to take an image from another of his many spheres of intellectual activity, become rather like an architect's drawing, designed with great care but then discarded, while the building itself was constantly being altered and extended according to the taste of succeeding generations, with the result that eventually the original ground plan could only be rediscovered through excavation.

In addition to those that can be identified in this way as later versions constantly evolving through transmission, there remain in the above list a potential 17 further compositions by Cantemir. Given his enduring high reputation as a composer it was only to be expected that, like earlier masters from Muẓaffer right back to the legendary father-figure of the Ottoman classical tradition, ʿAbd al-Qādir al-Marāġī (d. 1435), his output was destined to be enriched by sundry posthumous additions, and it is therefore hardly surprising that some of the 17 can confidently be dismissed as inauthentic, for example the peşrevs in nihavent and sazkâr, and the semai and the beste in nişaburek.[24] That the semai in pençgâh is also inauthentic has been demonstrated by Feldman, who has convincingly identified it as being derived from 243, an early composition also notated by ʿAlī Ufḳī.[25] (The relationship between the two is fascinating, and possibly unique, involving as it does a recasting of material in another rhythmic cycle: there appear to be no recorded parallels to what is in effect a process of retardation effected by means of a shift, in most sections, from the six time-unit semai cycle of 243 to the ten time-unit semai-i lenk.[26]) This later version can therefore be discarded, and it is fair to say

[21] See Feldman, op. cit., pp. 445-9.

[22] In each case see the footnotes in Part i.

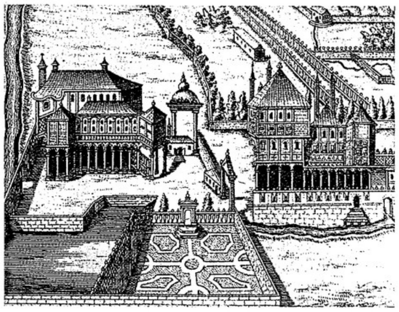
[23] The only possible connexion appears to be the title: 310 is called *mevc-i deryā* ('sea-waves') and Popescu-Judetz notes this as a title for *26* elsewhere (*Studies in Oriental Arts*, Pittsburgh: Duquesne University Press, 1981, p. 167)

[24] For the peşrev in nihavent there are competing claims to authorship, one of them compelling; the other peşrevs, quite apart from anything else, are in modes which did not form part of Cantemir's compositional palette.

[25] op. cit., pp. 487-90. The relationship does not hold throughout, but M apart the similarities in melodic contour are consistent and compelling.

[26] In fact, both cycles develop their own contrasting tempo ranges, so that corresponding to (yürük) semai we later find the slower six time-unit sengin semai.

that the other semais are at best dubious candidates for admission to the Cantemirian corpus, even if each deserves detailed scrutiny before a securer verdict can be reached.[27] But this task, as with the parallel investigation of the remaining peşrevs, lies beyond the confines of the present study. Because the form in which these pieces are recorded is stylistically (and therefore temporally) at some remove from the notations Cantemir has left us they can only be evaluated properly in the wider context of a study of eighteenth- and early nineteenth-century developments—one of several avenues of reseach to which, fortunately, his collection still has much to contribute.



Palace of Prince Demetrius Cantemir

[27] The two semais in buselik aşirani are quite unrelated and cannot represent different lines of evolution from a common ancestor. In any case, 271, the semai in the same mode that might possibly be by Cantemir, resembles neither. A further semai attributed to Cantemir is one in ırak published along with a peşrev in ırak similar attributed to him in X. Tsiamoulēs and P. Ereunidēs, *Rōmēoi synthētēs tēs polēs (17os-20os ai.)*, Athens: Ekdoseis Domos, 1998, pp. 87-9. Both pieces are much later in style, and as there appears to be no reference to ırak pieces by Cantemir from which they might conceivably be derived they may be dismissed as spurious. For neither is a source given.

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Fonton→Neubauer

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296	şiraz, uzzal, ısfahan, saba, kuçek, zirgüle, buselik, büzürk, buselik aşirani, zirefken, neva, baba tahir, arazbar, uşşak, beyati, karcığar, muhayyer, sünbüle, acem, nihavent, kürdi, acem aşirani, hicaz, şehnaz, hüzzam, geveşt, bestenigar, segâh, maye, nigriz, rehavi, rast, mahur, nişabur, pençgâh, çargâh, nühüft, ırak, eviç, rahat ül-ervah, muhalif ırak, ısfahan-ırak, sultani ırak, hisar

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